



Stock split and its effect on stock returns – A case study on selected companies in India

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Abstract

The stock split is one of the corporate actions which increases the liquidity and marketability of the securities. This stock split is one of the stock events should be observed by the investors for investing of their funds in short period. In this regard above study is an empirical study examines the impact of stock split announcement and stock split event on the stock price behaviour. The research variables in the study included share prices during five day pre and post announcement and event of stock split of selected companies during 2020 and 2022. The selected companies are KBC global ltd and Tirupati Forge Ltd. These are selected randomly from NSE stock split companies during the study period. The study used T- test to measure the impact of stock split during pre and post announcement and event on share price returns of selected companies. The study measured the returns in absolute figures in rupees. The study observed the mixed result in the stock price behaviour in selected companies after their stock split. It means that some companies return are positive and negative during pre and post stock split movement during pre and post five days from stock split announcement and stock split event.

Keywords: Stock split, corporate events, share price behavior

Introduction

A stock split is a corporate action that diminishes the nominal value of existing shares in a certain ratio. A 1:5 stock split involves partitioning one existing share into five shares. The face value of shares will diminish to one-fifth of the initial face value. For example, if an investor has 100 shares of a company with a par value of Rs.10 each, a stock split in the ratio of 1:5 will increase the total number of shares to 500, while the par value of each share will be reduced to Rs.2. From the company's perspective, there is no modification in its share capital, as an increase in the number of shares is offset by a reduction in the face value, so maintaining the constancy of the product of face value and the outstanding number of shares. Companies consider share splits when their secondary market valuations are deemed unreasonably high, hence restricting investor involvement. A reduction in price per share subsequent to a split improves market liquidity. A split, akin to a bonus, is an accounting entry that results in an increased number of outstanding shares in the company's records, accompanied by a reduced face value, without providing any economic benefit to the shareholders. A share split may be utilized to influence investor psychology by reducing the market price per share and to improve market liquidity, without offering any economic benefit to shareholders. As the total number of shares rises without any economic changes in the Profit and Loss statement or Balance Sheet, per share measures (earnings per share, book value per share, market price per share, etc.) experience an immediate fall. Nevertheless, as shareholders' proportional ownership remains same despite an increase in the number of shares they hold, there is no detrimental impact on shareholders at the aggregate ownership level.

Review Of Literature

Manik & Benny, Barnas. (2023) ^[1] described the stock split is one of the corporate actions that the company can take to reduce the nominal value of the share price. A stock split is done by increasing the number of outstanding shares to

encourage more share trading. This study aims to test whether there is a significant change in the performance of stock returns before and after the stock split operation. Hypothesis testing resulted in the conclusion that there is a substantial difference between return and stock split. This conclusion was reached based on the test findings.

Nadia & Prilanita (2023) examined the effect of the high level of stock prices, company financial performance, and stock trading liquidity on stock split decisions in companies listed on the Indonesia Stock Exchange. It uses a quantitative approach. The research population includes all companies listed on the Indonesia Stock Exchange in the 2014-2016 period. The analytical method used in this study is logistic regression analysis. Based on research results, it can be concluded that the level of overpriced stock prices by proxy Price Earnings Ratio (PER) has a significant positive effect on the company's stock split decision. The level of expensive stock prices proxied by Price Book Value (PBV) has a significant positive effect on the company's stock split decision. The Nagelkerke R Square value in this study is 0.702 which means the ability of the variable level of expensive stock prices, the company's financial performance, and stock trading liquidity explains the company's decision variable to do a stock split of 70.2%. The remaining 29.8% of the dependent variable is explained by other factors outside the model.

Priatno, Jerri & Freddy, Freddy(2021) ^[3] opined that Strong companies will not be too affected by news issues about stock splits, but several other companies that do stock splits actually experience a decline in demand for their shares. This study aims to analyze the effect of stock splits on abnormal stock returns and stock liquidity. In this study, the authors use quantitative research methods with a descriptive research approach, because there are variables to be examined and the relationship aims to describe the characteristics or behaviour of a population in a systematic and accurate way regarding the relationship between the variables to be studied. Based on the results of the different tests on the average TVA before and after the stock split, it

shows that there is a significant difference between TVA before and after the stock split.

Pradhan & Subhendu (2018) study attempted to find out the impact of stock split on shareholders' wealth. The samples were selected from 500 companies of S&P BSE 500 index. The study analyzed the impact by taking the share prices of sampled companies for 30 days before and 30 days after the stock split announcements. The market adjusted model was used for calculating the abnormal returns. The statistical tools such as paired sample t-test and analysis of variance were used for analysis. The study concluded that stock split did not affect the share prices as per the theoretical point of view, but in reality, it affected the share prices and increased trading volumes after split. The study also concluded that stock split had an impact on shareholders' wealth, but this impact was not different according to the nature of the industry. © 2018, Associated Management Consultants Pvt. Ltd. All rights reserved.

Alon Kalay & Mathias Kronlund (2014) [4] the study re-examine whether the abnormal returns around stock split announcements can be explained by an information hypothesis. Our evidence establishes a link between the abnormal returns and future earnings growth. Analysts revise earnings forecasts by 2.2-2.5% around split announcements, and this revision is significantly larger than that for matched firms. Further, show that the earnings information in a split likely arises from the fact that splitting firms experience less mean reversion in their earnings growth relative to matched firms. Consistent with an earnings information hypothesis, the analyst revision and the abnormal returns are stronger for firms with more opaque information environments, and the cross-sectional variation in analyst revisions is related to the variation in abnormal returns.

Eric C. Chang Tse-Chun Lin Xiaorong Ma (2012) [5] studies the three proxies for stock price informativeness, adjusted probability of information based trading, price non-synchronicity and probability of information-based trading (PIN), decrease significantly due to enlarged investor base after stock splits. The results suggest that investors are less incentivized to gather firm specific information when firm's investor base expands,

Need of the Study: Stock split is one of the corporate events use by the corporate companies to lock wealth creation by the companies to the shareholders. Stock split leads to lock of wealth, decrease in share prices, increase in

number of shares which in turn increase the liquidity to the share and trading volume. Stock split does result in eradication of shareholders wealth it only leads to price reduction of the share. The research studies on stock split analysis are few due to lack of sufficient data and complexity in analysis. Thus, present study focused on the measuring the impact of stock split on share price returns during pre and post announcement and event in Indian context.

Objectives of the study

- To examine the stock return during pre and post announcement and event of stock split in the case of KBC Global Ltd
- To study the stock return during pre and post announcement and event of stock split in the case of Tirupati Forge Ltd
- To offer the appropriate suggestions for investors in taking investment decisions

Hypothesis: The study formulated following alternative hypothesis and examined with T-test, where null hypothesis are implied

H1: There is significant impact stock split announcement on stock price returns of KBC Global ltd

H2: There is significant impact stock split announcement on stock price returns of Tirupati Forge Ltd

H3: There is significant impact stock split event on stock price returns of KBC Global ltd

H4: There is significant impact stock split event on stock price returns of Tirupati Forge Ltd

Research Methodology: Present study is an analytical and event study in nature and purely based on the secondary data collected from various published sources. The research variables in the study included share prices during five day pre and post announcement and event of stock split of selected companies in 2021 immediate covid 19 period. The selected companies are KBC global ltd and Tirupati Forge Ltd. These are selected randomly from NSE stock split companies during the study period. The study used T- test to measure the impact of stock split during pre and post announcement and event on share price returns of selected companies. The study measured the returns in absolute figures in rupees.

Data Analysis and Interpretation

Table 1: Share price return's during pre and post stock split announcement KBC Global Ltd

Pre-announcement share price returns			Post- announcement share price returns		
Date	Price	Returns	Date	Price	Returns
24-05-2021	176.85	o	31-05-2021	179.2	1.96
25-05-2021	177.05	0.11	01-06-2021	185.15	3.32
26-05-2021	177.95	0.51	02-06-2021	187	1.00
27-05-2021	176.2	-0.98	03-06-2021	188.05	0.56
28-05-2021	175.75	-0.26	04-06-2021	187.95	-0.05
TOTAL		-0.62	TOTAL		6.79
AVERAGE		-0.15	AVERAGE		1.36
Pre-split share price returns			Post- split share price returns		
05-08-2021	204.5	o	12-08-2021	21.1	0
06-08-2021	203.7	-0.39	13-08-2021	22.15	4.98
09-08-2021	209.8	2.99	16-08-2021	22.3	0.68
10-08-2021	208	-0.86	17-08-2021	21.65	-2.91
11-08-2021	201.05	-3.34	18-08-2021	22.7	4.85

TOTAL		-1.60	TOTAL	7.59
AVERAGE		-0.40	AVERAGE	1.52
T-Test: Paired Two Sample for Means (Pre-post announcement)				
Mean	176.76	185.47	t Stat	-4.90842510
Variance	0.7105	13.64075	P(T<=t) one-tail	0.003997737
Observations	5	5	t Critical one-tail	2.131846782
Correlation	-0.2237278		P(T<=t) two-tail	0.007995
Difference	0		t Critical two-tail	2.776445105
Df	4			
T-Test: Paired Two Sample for Means (Pre-post stock split event)				
Mean	205.41	21.98	t Stat	111.1870553
Variance	12.1855	0.38325	P(T<=t) one-tail	1.96187E-08
Observations	5	5	t Critical one-tail	2.131846782
Correlation	-0.240509225		P(T<=t) two-tail	0.00000
Difference	0		t Critical two-tail	2.776445105
Df	4			

Source: Computed by the Author from NSE India

Table 2: Share price return’s during pre and post stock split announcement Tirupati Forge Ltd

Pre-announcement share price returns			Post- announcement share price returns		
Date	Price	Returns	Date	Price	Returns
18-08-2021	91.8	o	26-08-2021	86.95	2.23
20-08-2021	87.25	-4.96	27-08-2021	87.95	1.15
23-08-2021	85.5	-2.01	30-08-2021	88.5	0.63
24-08-2021	87.9	2.81	31-08-2021	84.1	-4.97
25-08-2021	85.05	-3.24	01-09-2021	84.1	0.00
TOTAL		-7.40	TOTAL		-0.97
AVERAGE		-1.85	AVERAGE		-0.19
Pre-split share price returns			Post- split share price returns		
30-09-2021	99.45	o	07-10-2021	12.85	o
01-10-2021	103.9	4.47	08-10-2021	13.45	4.67
04-10-2021	109.05	4.96	09-10-2021	14.1	4.83
05-10-2021	109.7	0.60	10-10-2021	14.8	4.96
06-10-2021	107.05	-2.42	11-10-2021	15.5	4.73
TOTAL		7.61	TOTAL		19.20
AVERAGE		1.90	AVERAGE		3.84
T-Test: Paired Two Sample for Means (Pre-post announcement)					
Mean	87.5	86.32	t Stat	0.820226041	
Variance	7.17875	4.41575	P(T<=t) one-tail	0.229075644	
Observations	5	5	t Critical one-tail	2.131846782	
Pearson Correlation	0.110674743		P(T<=t) two-tail	0.458151	
Hypothesized Mean Difference	0		t Critical two-tail	2.776445105	
df	4				
T-Test: Paired Two Sample for Means (Pre-post stock split event)					
Mean	105.83	14.14	t Stat	58.94239109	
Variance	17.81575	1.10675	P(T<=t) one-tail	2.48072E-07	
Observations	5	5	t Critical one-tail	2.131846782	
PCorrelation	0.76830643		P(T<=t) two-tail	0.000000	
Mean Difference	0		t Critical two-tail	2.776445105	
df	4				

Source: Compiled by Author from NSE India

1. Kbc Global Limited

The study observed that on 24-05-2021 the share price was 176.85, and the return is 0, indicating no change in the price. The share price increased slightly from 176.85 to 177.05 on 25-05-2021, resulting in a return of 0.11%. The share price increased further to 177.95 on 26-05-2021, generating a return of 0.51%.The share price decreased from 177.95 to 176.2 on 27-05-2021, leading to a return of -0.98%.The share price slightly decreased from 176.2 to 175.75 on 28-05-2021, resulting in a return of -0.26%.The total pre-announcement share price return is -0.62%, with an average return of -0.15%. The study observed that on 31-05-2021 The share price was 179.2, and the return is 1.96%, indicating an increase. The share price increased from 179.2

to 185.15 on 01-06-2021, resulting in a return of 3.32%. The share price increased further to 187 on 02-06-2021, generating a return of 1.00%.The share price increased slightly to 188.05 on 03-06-2021, leading to a return of 0.56%.The share price slightly decreased from 188.05 to 187.95 on 04-06-2021, resulting in a return of -0.05%.The total post-announcement share price return is 6.79%, with an average return of 1.36. In the t -test paired two sample test, the P value is 0.007995 which is less than the standard alpha value of 0.05. This indicates that reject null hypothesis and accept alternative hypothesis that there is significant impact of stock split and share price behaviour
The study observed that on 05-08-202, the share price was 204.5, and the return is 0, indicating no change in the price.

The share price decreased from 204.5 to 203.7 on 06-08-2021, resulting in a return of -0.39%. The share price increased to 209.8 on 09-08-2021, generating a return of 2.99%. The share price decreased to 208 on 10-08-2021, leading to a return of -0.86%. The share price significantly decreased from 208 to 201.05 on 11-08-2021, resulting in a return of -3.34%. The total pre-split share price return is -1.60%, with an average return of -0.40%. The study observed that on 12-08-2021 The share price was 21.1, and the return is -89.51%, indicating a substantial decrease. The share price increased from 21.1 to 22.15 on 13-08-2021, resulting in a return of 4.98%. The share price increased further to 22.3 on 16-08-2021, generating a return of 0.68%. The share price decreased to 21.65 on 17-08-2021, leading to a return of -2.91%. The share price increased slightly to 22.7 on 18-08-2021, resulting in a return of 4.85%. The total post-split share price return is -81.92%, with an average return of -16.38%. In the t-test paired two sample test, the P value is 0.000000 which is less than the standard alpha value of 0.05. This indicates that reject null hypothesis and accept alternative hypothesis that there is significant impact of stock split on the share price behaviour.

2. Tirupati Forge Ltd

The study observed that on 18-08-2021. the share price was 91.8, and the return is 0, indicating no change in the price. The share price decreased from 91.8 to 87.25 on 20-08-2021, resulting in a return of -4.96%. The share price decreased further to 85.5 on 23-08-2021, generating a return of -2.01%. The share price increased from 85.5 to 87.9 on 24-08-2021, yielding a return of 2.81%. There was a decrease in the share price from 87.9 to 85.05 on 25-08-2021, leading to a return of -3.24%. The total pre-announcement share price return is -7.40%, with an average return of -1.85%. The study observed that on 26-08-2021 The share price was 86.95, and the return is 2.23%, indicating an increase. The share price increased from 86.95 to 87.95 on 27-08-2021, resulting in a return of 1.15%. The share price increased slightly from 87.95 to 88.5 on 30-08-2021, generating a return of 0.63%. The share price decreased slightly to 84.1 on 31-08-2021, leading to a return of -4.97%. The share price remained unchanged at 84.1 on 01-09-2021, resulting in a return of 0.00%. The total post-announcement share price return is -0.97%, with an average return of -0.19%. In the t-test paired two sample test, the P value is 0.458151 which is less than the standard alpha value of 0.05. This indicates that reject null hypothesis and accept alternative hypothesis that there is significant impact of stock split and share price behaviour.

The study observed that on 30-09-2021, the share price was 99.45, and the return is 0, indicating no change in the price. The share price increased from 99.45 to 103.9 on 01-10-2021, resulting in a return of 4.47%. The share price increased further to 109.05 on 04-10-2021, generating a return of 4.96%. The share price increased again to 109.7 on 05-10-2021, leading to a return of 0.60%. The share price decreased slightly to 107.05 on 06-10-2021, resulting in a return of -2.42%. The total pre-split share price return is 7.61%, with an average return of 1.90%. The study observed that on 07-10-2021 The share price was 12.85, and the return is -88.00%, indicating a significant decrease. The share price increased from 12.85 to 13.45 on 08-10-2021, resulting in a return of 4.67%. The share price increased further to 14.1 on 09-10-2021, generating a return of

4.83%. The share price increased again to 14.8 on 10-10-2021, reporting return of 4.96%. The share price continued to rise to 15.5 on 11-10-2021, resulting in a return of 4.73%. The total post-split share price return is -68.80%, with an average return of -13.76%. In the t-test paired two sample test, the P value is 0.000000 which is less than the standard alpha value of 0.05. This indicates that reject null hypothesis and accept alternative hypothesis that there is significant impact of stock split and share price behaviour.

Findings of the Study

- The study found that, KBC GLOBAL Company generated -0.62% returns five trading session pre stock split announcement with an average of -0.15% per day, on the other hand, it generated total 6.79% in five trading session during post stock split announcement with average of 1.36%. This indicates that KBC companies stock returns is lower during pre-stock split news than post period. The study found that, KBC GLOBAL Company generated -1.60 % returns five trading session pre stock split with an average of -0.40 % per day, on the other hand, it generated total -81.92 % in five trading session during post stock split with average of -16.38%. This indicates that KBC companies stock returns is lower during pre-stock split than post period.
- The study found that, KBC GLOBAL Company generated -7.40 % returns five trading session pre stock split announcement with an average of -1.85 % per day, on the other hand, it generated total -0.97 % in five trading session during post stock split announcement with average of -0.19 %. This indicates that KBC companies stock returns is lower during pre-stock split news than post period. The study found that, KBC GLOBAL Company generated 7.61 % returns five trading session pre stock split with an average of 1.90 % per day, on the other hand, it generated total 19.20 % in five trading session during post stock split with average of 4.80 %. This indicates that KBC company's stock returns are lower during pre-stock split than post period.

Conclusion

The stock split is one of the corporate actions used by the companies to increase the liquidity in the stock by reducing the face value and market value of the shares without change in the wealth of the shareholders. This increases the liquidity and marketability of the securities. This stock split is one of the stock events should be observed by the investors for investing of their funds in short period. In this regard above study is an empirical study examines the impact of stock split announcement and stock split event on the stock price behaviour. The study observed the mixed result in the stock price behaviour in selected companies after their stock split. It means that some companies return are positive and negative during pre and post stock split movement during pre and post five days from stock split announcement and stock split event. The study recommends that a similar study can be done on other corporate events like bonus issue, merger and acquisitions, cross listing, rights issues so as to determine how the stock market reacts to these events. This will help stakeholders be in a position to conclude whether India stock market is efficient in the semi-strong form as different events conveys different information.

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