# Share Prices and Stock Splits 

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#### Abstract

: A stock split is a decision by company's board of directors to increase number of outstanding shares of the company without changing shareholders equity but by changing face value of equity shares. The discussion below focuses on the impact of share prices on the stock splits in India. By analyzing the existing literature on stock splits, we try to find answer to: how the stock splits help the common investor, what is the effect of stock splits on share prices and how the stock splits add value to the organization.


Keywords: Stock Split, Share Price, Shareholders, Equity

## 1. An overview

In the words of Nipun Mehta, ED \& Head (India). SG Pvt Banking India, "Stock market movements are intermittently reflective of economic fundamentals- globally as well as domestically, and of investor sentiment and investor confidence. These factors, and based on them the market movements, could be radically different in the short term and long term."

The basic reason for stock price fluctuations is that the forces of supply and demand interplay in the market. If more people wish to buy a stock than those who wish to sell it, the price of the stock rises. In other words, when the demand for a stock is more than its supply, the price of the stock rises.

To understand why people, demand more of a stock and less of another at any given point, it is important to first understand what news is good or positive for a company. The price movement of a stock indicates what the investors feel about the worth of a company.

The most important factor that influences the value of a company is its earnings. Earnings are the profit that a company makes over a period. Public companies report their earnings every quarter of a year. The report enables the analysts to determine the future value of the company on their earnings projection. So, if the earnings of a company are higher than expected, the price of its stock goes up. Conversely, if the earnings are weak, the price falls.

There is another scenario too that can change the sentiment towards a stock. During the dotcom bubble, the market capitalization of numerous internet companies grew into billions. The prices of their stocks rose, but the companies hardly made any profits.

A lot of other factors like company news, world news, terrorist attacks, chart patterns, stock momentum, stock splits, hype, fear and greed, industry stocks, analysts' targets, company layoffs and growth, economy, oil prices and inflation work towards a change in stock prices.

There are some possible effects of stock market fluctuations on a company's production and employment decisions, as well as on the macroeconomic equilibrium and dynamics.

Stock market fluctuations are positively related to production and employment decisions through the marginal bankruptcy costs and, secondly, changes in the value of equities arising from the stock market may have a greater impact on output and employment compared with changes in profit prospects for firms unquoted on the stock market. Average share price variations anticipate a likely future price surprise and an efficient stock market anticipates the real effects on output (and employment) of aggregate price shocks before these occur.

Empirical evidence also suggests that stock prices are connected to business cycles as well as to monetary shocks (Campbell, 1987, Campbell et al., 1988, Fama et al., 1989; Jensen et al., 1996; Patelis, 1997, Bordo et al., 2003). Among the New Keynesian contributions to macroeconomics, the theory of financial accelerator, by Bernanke and Gertler, has proposed a possible explanation of the risk of instability associated with stock price movements (Bernanke et al., 1999). Rising asset prices -the argument goes-improve the balance sheets of both firms and banks, thereby inducing the firms to borrow more and the banks to charge lower premiums on loans.

Due to stock market fluctuations, a firm faces the risk of being undervalued when it needs to finance new production, thereby increasing its probability of going bankrupt. As part of the individual firm's debt is assumed to be collateralized to its volatile stock, the company's risk of going bankrupt is linked to the fluctuations of its share price on the stock market. The stability in the stock market is a necessary condition to have output and price stability. By contrast, equilibrium in the stock exchange, where share prices rise (bull) or fall (bear). determine the dynamic behavior of the economy. Features of stock prices fluctuations are:

1. Stock market fluctuations are connected to the real economic decisions about production and employment through the marginal bankruptcy costs.
2. Shocks in the stock market at the time when productive inputs are paid, and debt is raised affect the firm's product and employment decision.
3. Provided that current shocks to the firm's share price are positively related to the firm's expected revenues, the stock market amplifies the effect of an expected change in revenues on current product and employment.
4. Average variations of the value of the stock anticipate a likely future aggregate price surprise.
5. The presence of the stock market anticipates real effects on output and employment of aggregate price shocks before these occur.

Stock market fluctuations are positively related to production and employment decisions through the marginal bankruptcy costs. By embedding the individual firm's behavior in a general equilibrium model, it becomes apparent that stock market fluctuations are at the centre of the relationships between general price level, price expectations and aggregate income. In particular, it can be established that the expected general price level can be equal to the actual general price level only when average stability in share prices is observed. Therefore, average share price variations anticipate a likely aggregate price surprise. Stock market shocks also anticipate the real effects on output and employment of price shocks before the latter occur: an aggregate negative shock to the stock market determines an immediate lower scale of production (and employment). followed by a second contraction when the negative shock to the general price level is realized.

In the light of these results, an uncontrolled stock market, however efficient it is, might be a source of instability for the whole economic system.

## 2. Stock Splits - A price improving phenomenon

A stock split proportionately increases the number of shares outstanding by corresponding decrease in face value of shares. It is said to be a complicated happening for researchers where in theory and practice are contrary to each other. On one hand, in theory, a stock split is a cosmetic change while
on other hand, empirically, several studies have observed that stock splits results in significant impact on ARs and liquidity around announcement and ex-split day of stock splits.

Stock splits generate interest to a researcher as they do not have any direct valuation implications. They are also sometimes described as 'cosmetic' events as they simply represent a change in the number of outstanding shares. The basic reason for such interest is therefore to understand why managers undertake such cosmetic decisions, even when they are potentially costly.

Two strands of explanations have been proposed in this regard: the first explanation resorts to information signaling whereas the second relies on possible valuation implications due to reasons such as the establishment of an 'optimal' price range that changes the shareholder composition and its implications for liquidity or change the underlying characteristics of return distribution characteristics (e.g. variance).

A stock split is a type of corporate action that replaces shares in a company with more shares in the same company of lower price. A stock split simply involves a company altering the number of its shares outstanding and proportionately adjusting the face value of each share. The balance sheet items remain same except that the total number of outstanding shares of the company increases proportionately to the ratio of split. The stock split, in no way, affects the intrinsic value of investment. It has no effect on net wealth. Thus, stock splits are a finer slicing of a cake, which is the total market value of the firm. It is like giving one the same amount of cake but in smaller pieces. Thus, the shareholders' total funds remain unaltered.

## 3. Past Literature

The stock splits increase the number of equities shares outstanding but has no effect on shareholder's proportional ownership of shares. Still, firms engage in these transactions, and stock prices rise when these transactions are announced. Some researchers have carried out their research on stock splits over the years.

Empirical research has shown that the market reacts positively to the announcement of a stock split. The literature in this area has traditionally focused on stock splits where the split ratio is at least 1.25 to 1 ; those with ratios less than 1.25 are classified as stock dividends. Reverse stock splits are typically classified as transactions where the split ratio is less than one. Here, we will focus mostly on papers that deal with stock splits and refer to the other two events only when they add value to the discussion.

Broadly speaking the stock split, literature can be split along three categories: the first category deals with the potential theoretical reasons that can explain why managers may resort to stock splits. The second category consists of papers that are predominantly of empirical nature and those who investigate and document the reaction of the stock market around the announcement (and the exdate) of the decision to split the stock.We term this literature as "event' analysis research since it follows a classical event analysis methodology. The third category of papers deals with the longterm implications of the stock split and compares variables such as rates of returns, variance, short interest, betas, bid-asked spread, volume, liquidity, and valuation across the pre- and the post- stock split periods. This research falls into the second category and thus, we focus on reviewing more thoroughly the pertinent literature that falls into the second category.

In India Mishra (2007) taking a period of 1999-2005, concluded negative effect of stock splits into share prices and returns. He reported negative wealth effect of stock splits and rejected signaling hypothesis.

Dhar and Chhachhoaria (2008) studied the efficiency of Indian stock market using capital asset pricing model and $t$-test for significance. They supported signaling hypothesis as they found significant positive announcement affect for splits.

In India Mishra (2007) studied splits by taking a sample of 180 stock splits from 1999 to 2005 and noted statistically significant ARs of around $2.45 \%$ around three days of the ex-split day. Gupta and Gupta (2007) reported on an ex-split day significant ARs of $2.5 \%$. Specifically, they found significant positive ARs on ex-split day and next two days. Ray (2011) considered bonus issues, and stock splits that took place in period April 1996 to March 2008 taking an estimation window of 199 days from -230 to -31 days before announcement day. He concluded that Indian stock market is efficient in semi-strong form on bonus issue only. No ARs have detected for stock splits around exsplit day.

Chakraborty (2012) analyzed 234 stock splits from March 1999 to December 2008 and found significant positive ARs on ex-split day. There were high negative ARs in post-split period which wiped out much more than positive gain on the ex-split day.

Different studies have attempted to isolate directly or indirectly the effect of stock splits on share prices. It is difficult to generalize from the results because researchers used different time periods and stressed on split day or month.

The majority of studies indicate that abnormal price movement occurs before an announcement of stock splits. Researchers observed that market response lasts only for a few days around announcement and ex-split day. That needs to be tested in India also. There is a need to undertake studies that try to find capability of investors to process information and not be restricted to finding capability of markets to process information.

Stock split in a company happens when there is an increase in the number of shares of the stock and decrease in the value of a share. The stock split made by a company helps in creating an optimistic sign about the company in the market. However multiple stock splits are not advised for the companies. The stock splits help the common investor by increasing the value of the shares and help the company by adding value to the organization and helps in increasing of the market capitalization. The decrease in value of the share during stock split helps to bring the prices of the shares to the medium range so that a common investor also can trade easily. Also, this stock split can be used as a tool by the organization to increase their number of shares in the market and also the stock split will be used by the organization for making the financial ratios lucrative to the investors. With the help of this stock split, an organization can gain the attention to their organization in the market that provides a positive sign for the future improvements of the company. The cost plays an important role, and it is considered as an important deciding factor in the stock split. And this stock may have a positive impact on the price of the share, and also it may help in the improving of the liquidity of the stocks. The stock split may attract more small investors towards the shares, and the stock split date is very important compared to the announcement date regarding the stock split. And finally, it is concluded that, mostly all the time, the stock split has a definite association with the prices of the share and such the share prices will not adjust fully in proportion to the split ratio. The following are the answers to the proposed research questions as identified by the study:

### 3.1 Question 1: What is the effect of stock splits on share prices?

When a company splits their stock, a stock split occurs. During that time, the number of shares goes up while the price of the shares comes down, but the market capitalization of the company remains the same. The prices of the share get adjusted before and after the stock split to maintain the market capitalization. For example, if a company had some 100 shares with each share priced Rs. 10. The
market capitalization of the company will be Rs. 1000. The company splits the stock by 2 for 1 . Now the number of shares gets doubled to 200 shares, and each shareholder may hold twice the amount of shares in total, and also the prices of the share get reduced to half the amount, that is, Rs. 5. The market capitalization will be the same of Rs. $1000(200 * 5)$ after the stock split. When the prices of the shares get reduced after the stock splits, the prices of the shares will be more attractive to the small investors, and there will be more common buyers for the shares of the company.

### 3.2 Question 2: How the stock splits add value to the organization?

The stock splits to create a positive impact on the company in the market. When the stock gets split by a company, the value of the shares gets down to a medium range so that a common investor can invest in the shares of the company. This, in turn, will increase in the buying frequency of the shares by the investors. When the buying frequency gets increased, automatically the prices of the shares of the company also get increased. This, in turn, helps in the increase of the market capitalization of the company. Also, the stock split helps the company to increase the number of their shares in the market. This increase in the number of shares in the market gains the attention of the investors, and it acts as an indication that the company is doing well and there will be a positive future for the organization. And also, the stock splits will be used by the organization as a marketing tool for the company.

### 3.3 Question 3: How the stock splits help the common investor?

Stock split made by a company acts as a good buying indicator for the investors. The investors always need to make their investments in high-performing companies and having strong fundamentals. So, there will be an increase in the demand for those shares which will drive up the share prices over time. The stock split will bring the high-priced stocks which common investors are not able to buy, to medium range. This helps most of the small investors to make their investments in those shares. In some cases, the stock split helps the investors by indicating a positive sign regarding the prospects of the company so that the investors can make their investments in those company shares. Also, the investors who are already holding the shares will get added number of shares after the stock split. And then the appreciations of prices of each share after the stock split are all profit to the investors.

## 4. Recommendations

The stock splits made by a company are useful to both the organization and the investor. It helps the organization to increase the number of shares and to create a positive impact on the company in the market. On the other hand, it is useful to the investor; since after the stock split, the share prices will get reduced to considerable prices so that many small investors can buy the shares and also the number of shares gets increased for the stockholders those who are already holding the shares. The following are some of the recommendations that may help the investors while trading in splitters.

- The investors have to make a timeframe for the holding period of the stocks while planning for their investment or the trading portfolio.
- Once when a company announced the stock split, after that the investors have to make a continuous watch on daily or weekly basis regarding the position and prices of the share and the market reaction. Depending on the behavior of the market and the share price movement, then the investors can find the right time to shift her / his investing in other stock which may expect to announce its stock split in some three to six months.
- Both the traders and investors have to make their concentration on the market condition and the particular sectors environment. This is because each stock split made by the company's made behave differently. Some stock prices may increase after the split, and in some cased, the stock prices may get reduced after the stock split. Anything can happen, and all these depend on how much appreciation that the particular company enjoyed before the stock split.
- The investors or traders should not simply buy the shares of the stock split companies since they are listed. A deep should be made, and there should be at least one good reason to buy those shares, and also an exact trade plan should be made that should have a well-planned exit strategy.
- And while choosing the companies to buy the shares, among all the stock split announced companies, a deep analyze has to be made on the reasons why a particular company is doing stock splits. Sometimes the companies may announce stock splits in order to meet the listing requirements in the exchange that force them to maintain a certain number of outstanding shares. So, these types of companies have to be excluded from the list. When all the weaker players get rejected from the list, then a menu of stronger stocks can be created. From that the investors or traders can choose the companies to make their investments.

The above recommendations when adopted will help the investors while making their investments in stock split shares.

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