# NEWS AND ITS EFFECT: EVIDENCES FROM INDIAN BANKING SECTOR

[1]Mr. Sagar B Patil, [2]Dr. Virupaxi Bagodi, [3]Dr. Prakash Basanna

[1]Asst Prof, [2]Professor, [3]Professor
School of Management Studies and Research,
BVB- CET, Hubli, Karnataka. 580031.

## ABSTRACT

The price behaviour of a stock has been an area of interest to both academicians as well as investors. It is widely acclaimed by many researchers that news affects the behaviour of stock price. Aharoni and Swary (1980) assert that financial news has significant effect on the stock while, Filip et al. (2012) found out that even non-financial news has significant effect on the stock price movement. In this study, researchers have studied the behaviour of banking stocks to financial and non-financial news. Required data was gathered from the web for a one year period. Return, risk, standard deviation, co-efficient of correlation, and beta values were used to assess the significance. It was found that both financial and non-financial news has significant impact on the stock price in India.

**Keywords:** Share price, Banking, News impact, India.

### Introduction

The economic development of a country largely depends on its industrial and commerce activities. Many researchers, often, argue that economic growth of a nation is directly linked to the stock market developments. Stock markets, in modern economy, play vital role as an important source in providing the necessary capital for carrying out industrial and commerce activities. It provides finance to the organisations by raising funds, from individuals and institutions, through shares. It attracts foreign institutional investors into the economy. It also provides a platform for mutual fund managers for investment and hence, mitigates the risk of individual investors. Stock market is referred to as the barometer of the economy.

The players in market include individual investors, institutional investors and foreign investors. They participate in the trading of shares with an intention of realising better returns. The demand for and the supply of shares determines the trading price. It is governed by the activities of the firm. The activities are made known to the public through press releases, publications, and corporate announcements. The participants are always on the lookout for such news. They being sensitive, react differently to different news items. This leads to volatility in the stock market. Many researchers have attempted to understand the effect of news on share price in developed countries.

The authors have examined one year data of the news announced on Bombay Stock Exchange (BSE) by four banks from amongst the top 30 registered companies. They have collected the relevant stock price of these four banks and BANKEX closing values. They have conducted t-tests and computed standard deviation and beta values in drawing the conclusions. The authors are examining five years data of the stock price of more number of banks. They will report the results once the analysis is completed.

### Literature review

The price behaviour of a stock has been an area of interest to both academicians as well as investors. It is widely acclaimed by many researchers (for example French and Roll, 1986; Andersen et al., 2003) that news affects the behaviour of stock price. News can be defined as recently received piece of noteworthy information about current events. It could be either through broadcast or published. This throws light on two aspects, one, it contains significant information and, the other, authenticity. Significant information can be derived from financial news such as earnings and dividends, or from non-financial news such as appointment or retirement of directors and chairman’s speech. Authenticity of the news refers to the source of dissemination of the information such as news announced by corporate houses, announcements on registered stock exchanges, and press releases.

Neuhierl et al. (2013) based on many previous studies, report that news can be classified in to two categories namely financial and non-financial. Many studies (Ball and Brown, 1968; Fama et al., 1969; Mandelker, 1974; Aharony and Swary, 1980) report that financial news on earning announcements, stock splits, dividend have significant impact on stock price. However, Boudoukh et al. (2012) assert that the financial literature has failed to demonstrate a strong relationship between stock prices and news. Neuhierl et al. (2013) assert that non-financial news also strongly impact the stock price behaviour as that of financial news. They demonstrated that customer losses, management terminations, and product defects negatively affect the stock price. Further, news releases about new products, patent awards, unsuccessful ventures, legal settlements, successful research outcomes have positive impact on the stock price movement. Filip et al. (2012) in their work on market behaviour in emerging economies reports that investors are sensitive to diverse non-financial news such as macroeconomic releases, environmental or societal changes etc. They found that investors in these markets react only after the news announcement.

Seo et al. (2004) report five classification of news in their work. They classify the news as good, good uncertain, neutral, bad uncertain, bad. Good news articles exhibit explicit evidence of healthy financial status. Good uncertain news refers to prediction of future profitability and forecasts. Financial facts about an organization are referred to as neutral. Predictions which address the future losses or no profitability is referred to as bad uncertain. Bad news depicts the bad financial status of an organization.

Tetlock (2007) and Tetlock et al. (2008) demonstrated that the impact of general financial news on stock price is short-lived. Schumaker and Chen (2009) have carried out a study of news impact on stock price with a time interval of 20 minutes. Li et el. (2014) assert that 3 to 6 days is the reasonable time within which a news will have an impact on the market. Neuhierl et al. (2013) report that news will have an impact one day prior to news event to five days after the news. Filip et al. (2012) considered the effect of news on the subsequent five days post the announcement. Chan (2002) concluded from their studies that the news will have no effect on the stock price after one year.

**Results and Discussions**

In order to examine whether the news has impact on the stock price, one year data (1st July 2015 to 31st June 2016) was gathered from BSE website. The data include the stock price of HDFC Bank Ltd., ICICI Bank Ltd., Axis Bank Ltd., and SBI, BANKEX, and news of these banks on BSE along with their timings. Independent T-test was conducted to study the effect of news on stock price. This is carried out as follows:-

- If the news is released on a trading day before 3.30 pm, the previous day stock price is considered as the reference value. This value is compared with today's and subsequent four trading days stock prices.
- If the news is released on a trading day after 3.30 pm, today's stock price is considered as the reference value. This value is compared with the subsequent five trading days stock prices.

In all, during the study period, 420 news items were announced on BSE. These were classified as financial and non-financial news. Financial news include: earning announcements, capital structure, corporate strategy and performance, and payouts. Non-financial news include: developments and recognitions, legal settlement and exchange, corporate action and management changes, meeting and events.

Based on the T-test results, the news is classified as 'good' if, after the news, stock price has increased over the reference value and is statistically significant. If the stock price has decreased, then it is 'bad' news. If there is statistically insignificant difference between the reference value and the subsequent five days stock price, the news item is classified as 'indifferent' news. The classified news results are presented in Table 1, 2, and 3.

**Table 1: Classified Financial News**

| | HDFC | | ICICI | | AXIS | | SBI | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| Good | 6 | 25% | 18 | 20% | 23 | 32% | 7 | 35% | 54 | 26% |
| Bad | 3 | 13% | 29 | 32% | 25 | 35% | 5 | 25% | 62 | 30% |
| Indifferent | 15 | 63% | 43 | 48% | 24 | 33% | 8 | 40% | 90 | 44% |
| Total | 24 | | 90 | | 72 | | 20 | | 206 | |

**Table 2: Classified Non-Financial News**

| | HDFC | | ICICI | | AXIS | | SBI | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| Good | 23 | 28% | 6 | 13% | 19 | 37% | 9 | 26% | 57 | 27% |
| Bad | 10 | 12% | 15 | 33% | 5 | 10% | 10 | 29% | 40 | 19% |
| Indifferent | 48 | 59% | 25 | 54% | 28 | 54% | 16 | 46% | 117 | 55% |
| Total | 81 | | 46 | | 52 | | 35 | | 214 | |

It is evident from Tables 1 and 2 that financial news has more impact on the stock price than non-financial news. It can also be seen that financial news has more negative impact on stock prices while non-financial news has more positive impact on the stock prices. The private sector banks appear to make more news announcements on BSE than public sector banks. The public sector bank news appears to make an impact on stock price whether it is financial or non-financial.

**Table 3: Composition of News**

| | **Good** | | **Bad** | | **Indifferent** | |
|---|---|---|---|---|---|---|
| Earning announcements | 6 | 32% | 9 | 47% | 4 | 21% |
| Capital structure | 42 | 24% | 49 | 28% | 82 | 47% |
| Corporate strategy and performance | 3 | 38% | 2 | 25% | 3 | 38% |
| Payout | 3 | 50% | 2 | 33% | 1 | 17% |
| Legal settlement and exchange | 9 | 53% | 0 | 0% | 8 | 47% |
| Corporate actions and management changes | 14 | 33% | 8 | 19% | 20 | 48% |
| Development and recognition | 1 | 33% | 0 | 0% | 2 | 67% |
| Meetings and events | 35 | 23% | 31 | 20% | 86 | 57% |

Banking firms appear to release information more on capital structure, and meetings and events. From Table 3 it is clear that, amongst financial news, payouts and earning announcements have more effect on the stock price than any other news items while capital structure has the least effect. Amongst the non-financial news, legal settlement and exchange compliance news has more effect on stock price than any other type while development and recognition news has the least influence on the stock price. Information related to legal settlement and exchange compliance, and corporate actions and management changes influence the stock price almost equally.

To understand, further, the effect of news return of stock (pre and post), beta (pre and post), standard deviation (pre and post), and co-efficient of determination were computed for each news item. Beta values reveal the volatility and standard deviations reveal the risk. In computing these values, the closing stock price of five trading days prior and post announcement of news are considered.

Earning announcements containing quarterly or yearly increase in earnings, increase in revenue, and advances higher than deposits have always increased the stock price. These news items are 'good' news. The increase in risk and decrease in volatility was found when the profit levels have increased in the range of 20 - 25% Q-o-Q. Volatility and risk have increased when there is loss Q-o-Q. When the income level or profit has increased in the range of 10 - 20% volatility and risk have decreased. Decrease in risk and increase in volatility was observed when profit is lesser Q-o-Q.

Earning announcements containing quarterly or yearly decrease in earnings, decrease in revenue, and deposits higher than advances have always decreased the stock price. These news items are 'bad' news. It is observed that risk increases and volatility decreases when the loss is high Q-o-Q. Risk and volatility increases when the loss is marginal (less than 5%). The news remains 'indifferent' when there is marginal increase/decrease in revenue and marginal changes in deposits and advances.

Corporate strategy and performance contains cash outflows for the business like cash flows, and banks performances news has always increased the price. These news items are 'good' news. The volatility and risk have decreased if there is good news regarding utilisation of funds for lending purposes. The close observation was given to the CASA ratio, if there is a healthy ratio then resulted into 'good', vice a versa is true. The increase in risk and decrease in volatility was observed when there were funds outflow.

Corporate strategy comprising of no modifications made to financial statements resulted into decrease in price of the share. These items are 'bad' news. The increase in risk and decrease in volatility was observed when from A of standalone statement was submitted by the auditors without any changes/modifications. But, when form A of consolidated statements was submitted both volatility and risk have increased. The news remained 'indifferent' when there is marginal increase in the advances compared to the deposits.

Payout comprising of increase in dividend payments Y-o-Y, increase in dividend payout ratio, decrease in retention ratio resulted in increase in stock prices. These news items are 'good' items. There is an increase in risk and volatility when dividend paid Y-o-Y is same or higher but profit percentage for the year is same. There is a decrease in risk and an increase in volatility during the period of interest payment to debt holders.

Payout consisting of lesser dividend, decreased payout ratio resulted into decreased share price. These news items are 'bad' items. There is an increase in risk and decrease in volatility is observed during lesser payment of the dividend. It is observed that, there is increase in risk and volatility when same dividend is paid even when profitability ratios were down Y-o-Y. The news remained 'indifferent' with marginal change in dividend payout ratio Y-o-Y is observed. In this situation too, the risk and volatility levels have increased.

Capital structure consisting of issue of balance equity and debt mix, and ESOP's increased the share prices. These news items are 'good' news. The increase in risk and decrease in volatility was found when shareholding pattern has slightly changed along with issue of bonds in foreign denomination at lesser interest rates. It is observed that when more number of ESOP's is issued volatility and risk has increased. Decrease in risk and increase in volatility was noticed when less number of ESOP's are issued i.e., less than 75000 ESOP's of a face value. There is a decrease in risk and volatility during preferential issue, bonds in local currency are issued and private placements.

The capital structure consisting of issue of debt, equity and preference through direct allotment or rights issue which adds burden to company has led to decrease in price. These news items are 'bad' news. It is found that risk increases and volatility decreases when volume and frequency of ESOP's issued is high. The volatility and risk has increased during preferential issue, senior notes issue and moderate amount of ESOP's are issued. Decrease in risk and increase in volatility was observed during issue of debt (8% and above), rights issue and ESOP's issued in larger number at a face value. The news remains 'indifferent' when there is marginal increase/decrease in ESOP's issue and with balanced equity and debt mix was undertaken.

Legal settlement and exchange comprises of resolved legal aspects related to company affairs, clean operating affairs, solved human related issues, and zero pending investor complaints Y-o-Y resulted in increase in share prices. These news items are 'good' news. Risk increase along with volatility if there are any pending cases and resolved scams. Increase in risk and decrease in volatility when clean chit is obtained in scams. Along, any clarifications sought by the exchange, successfully has been submitted without any flaws.

Legal settlements with exchange related downgraded information resulted into decrease in prices. These news items are 'bad' news. The news remains 'indifferent' clarifications to exchanges and investor grievances are handled correctly. Risk and volatility has increased when information related to insiders trading is sent to exchange. Risk and volatility have decreased when zero investor grievances are pending.

Corporate actions and management changes comprises of news related to continuation/extension of existing director, re-appointment and appointment of news director, no changes in base lending rates have resulted in increase in share prices. These items are 'good' news. Risk and volatility increased when appointment of new director and closure of trading window for dividend payment purpose proposed. Risk and volatility decreased during appointment of additional director and independent director. Increase in risk and decrease in volatility was observed during dissemination KMP's information and reduction of MLR's.

Corporate actions and management changes containing last minute change in management, key personnel's and reduction of base rate decreased the share prices. These items are 'bad' news. Risk increased with decrease in volatility when last minute changes in management were made ahead of analysts meet. Risk and volatility decreased when GoI (Government of India) appointed a non-official director on the board. Decrease in risk and increase in volatility was observed when trading window was closed for dividend purposes and dividend paid is same percentage or marginally higher percentage. The news remains 'indifferent' when disclosure related issues, appointment and re-appointment of directors, dividend payout etc were discussed. Increase in risk and decrease in volatility was observed when fair disclosure of information system was discussed in meeting. Decrease in risk and volatility was observed when appointment of non-executive directors and KMP's and amendment of AoA (Articles of Association) were made. Increase in risk and volatility during the information related to ESOP'S, retirement of whole time director were discussed and disseminated. Increase in risk and decrease in volatility when general information, changes in management and CFO etc were discussed.

Development and recognition containing incorporation of new company resulted in increase in prices. These items are 'good' news. Increase in risk and decrease in volatility was observed as the said unit will take care of only a part of business i.e., Trade Receivables Discounting System. The news remains 'indifferent' when it had appeared in global news media related to its achievements in banking operations. Risk and volatility decreased when brand was nominated as global brand. Increase in risk and volatility as bank was named as best managed bank.

Meeting and events containing schedule of investors, voting results, approval audited results, appointment and reappointment of directors gave favourable scenario resulting in increased share prices. These news items are 'good' news. The news has shown a mixed reaction to news in-terms of risk and volatility to the outcomes of board meeting, and AGM/EGM's.

Meetings and events containing investor's presentation and approval of results and postal ballot results have decreased the prices. The news items are 'bad' items. The news has shown mixed reaction to the news of outcome of board meetings where debt raising issue is discussed, private placement, and non-convertible debentures. The news remains 'indifferent' when outcomes are in line and information dissemination policies, and disclosure policies have been discussed. The news has shown mixed reaction towards news like policy framing and information dissemination of investor meet, published information, outcome of resolution, executive committee meeting, and the foreign investors meet.

## Conclusions

Based on the results, the following conclusions are drawn, in Indian context, in the banking sector:-

- Financial news has more effect on the stock price than the non-financial news
- Financial news has more negative impact on stock prices while non-financial news has more positive impact.
- Amongst financial news payout and earning announcement and amongst non-financial news legal settlement and exchange compliance have more effect than any other news.
- Positive news resulted in increase in price and decreasing in risk and volatility on the other hand it is observed that bad news resulted in decrease in share prices and increase in risk and volatility.
- The private sector banks appear to make more news announcements on BSE than public sector banks. While public sector banks make more impact on stock price whether it is financial or non-financial news.

**References:**


- Aharony, J., and Swary, I. (1980). Quarterly dividend and earnings announcements and stockholders' returns: an empirical analysis, Journal of Finance, 35, 1-12.
- Andersen, T.G., Bollerslev, T., Diebold, F.X., and Vega, C. (2003). Micro effects of macro announcements: real-time price discovery in foreign exchange, American Economic Review, 93, 38-62.
- Ball, R., and Brown, P. (1968). An empirical evaluation of accounting income numbers, Journal of Accounting Research, 159-178.
- Boudoukh, J., Feldman, R., Kogan, S., and Richardson, M. (2012). Which news moves stock prices? A textual analysis, NBER Working Paper.
- Chan, W.S. (2002). Stock price reaction to news and no-news: drift and reversal after headlines, Working Paper, Sloan School of Management.
- Fama, E.F., Fisher, L., Jensen, M.C., and Roll, R. (1969). The adjustment of stock prices to new information, International Economic Review, 10(1), 1-21.

- Filip, A.C., Spatacean, I-O., and Nistor, P. (2012). The impact of non-financial reporting on stock markets in emerging economies, Procedia Economics and Finance, 3, 781-785.
- French, K., and Roll, R. (1986). Stock return variances: the arrival of information and the reaction of traders, Journal of Financial Economics, 17, 5-26.
- Li, Q., Wang, T., Li, P., Liu, L., Gong, Q., and Chen, Y. (2014). The effect of news and public mood on stock movements, Information Sciences, 278, 826-840.
- Mandelker, G. (1974). Risk and return: the case of merging firms, Journal of Financial Economics, 1, 303-335.
- Neuhierl, A., Scherbina, A., and Schlusche, B. (2013). Market reaction to corporate press releases, Journal of Financial and Quantitative Analysis, 48 (4), 1207-1240.
- Schumaker, R.P., and Chen, H. (2009). A quantitative stock prediction system based on financial news, Information Processing and Management, 45,571-583.
- Seo, Y-W., Giampapa, J., and Sycara, K. (2004). Financial news analysis for intelligent portfolio management, Working Paper, Carnegie Mellon University.
- Tetlock, P.C. (2007). Giving content to investor sentiment: the role of media in the stock market, Journal of Finance, 62, 1139-1168.
- Tetlock, P.C., Saar-Tsechansky, M., and Macskassy, S. (2008). More than words: quantifying language to measure firms' fundamentals, The Journal of Finance, 63(3), 1437-1468.