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Stock Return and Investor's Strategies to Firm Specific Announcements: A Study of S&P BSE SENSEX

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ABSTRACT

The **objective** is to investigate the effect of news on stock behaviour in terms of price and volume traded. Further, it is intended to explore the strategies adopted by the investors for various type of news items. **Methods** included collection of 18,014 news items from BSE website and classify as financial and non-financial news. Using paired t-test, the news further classified as good, bad, or indifferent. The effect of news on stock price and volume are found and the scrip return, risk and volatility are also computed pre- and post- announcement. **Findings** reveal that news has always affected the scrip volume traded on BSE, Mumbai. Non-financial news whether good, bad, or indifferent, has resulted in holding of the shares. It is **Concluded** that Financial bad news has resulted in holding of the shares except for earnings announcements. **Novelty** is effect of news on stock market based on news classified as good, bad, and indifferent or financial and non-financial. The effect of various types of news in stock market is also found along with the combined effect. The **implications** are helpful to the corporates, fund managers and individuals to time the information dissemination followed by strategizing trade.

***Keywords*:** stock prices; risk; return; investors; strategies

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INTRODUCTION

It is widely acclaimed by many researchers (for example, T.G. Andersen et al. [1]) that news affects the behaviour of stock prices and determines price. Investment decisions are affected by companies' announcements (C.S. Woodruff and A.J. Senchack [2]). A rational investor prefers the information available to formulate his/her investment strategy to gain profit (U. Bhattacharya [3]). Today investors obtain the timely information necessary for investment (S. Patil and V. Bagodi [4]).

A. Neuhierl et al. [5] classified news into financial and non-financial. Financial news such as earning announcements, stock splits, and dividends significantly impact stock prices (J. Aharony and I. Swary [6]). Non-financial news strongly impacts stock price behaviour (A.C. Filip et al. [7]). The impact of news should not be judged by stock price alone, the trading volume is positively correlated. C.M.C. Lee and B. Swaminathan [8] asserted that high-volume stocks experience more momentum due to the news.

Literature measures the inherent risk in stocks using standard deviation (E. Errais and D. Bahri [9]) to decide between safe and unsafe investments (F.K. Reilly [10]). It is one of the oldest approaches to studying riskiness (J. Lakonishok and A.C. Shapiro [11]). Impact of general financial news on stock price is short-lived (P.C. Tetlock et al. [12]). R.P. Schumaker and H.A. Chen [13] studied news impact on stock price with a time interval of 20 minutes. Q. Li et al. [14] assert that 3 to 6 days is a reasonable time for the news to impact the market. Studies reported that news impacted one day prior to the news event to five days after the news (A.C. Filip et al. [7]).

The authors have attempted to analyse information reflection on stock trading followed by strategies adopted during trading. Five years' data of BSE 30 companies, available on the BSE website, consisting of 18,014 news stories, has been systematically analysed. The return, risk, and volatility are computed to ascertain the potential impact on stock behaviour. The news collected is classified based on the content of the information. Based on post-announcement return, using a one-sample t-test, the news is classified as good, bad, and indifferent. The effect of each type of news on stock price and volume traded is elaborated in this paper.

LITERATURE REVIEW

Early studies of the efficient market (F.E. Fama [15]) propose that markets are driven by information. For example, (T.G. Andersen et al. [1]) confirmed that stock price behaviour was due to news. The investors exhibit their trading strategies considering news (P.C. Tetlock et al. [12]). The information hypothesis reveals that an informed trader benefits from an uninformed trader and, thus, engages in searching the news. The internet is a dominant information source with wide acceptability. The studies explored that investors trade on sentiments rather than fundamentals to generate excess returns. The studies highlighted that investors are more responsive to negative news than positive. The returns are lower when investors lower their sentiment, resulting in a sell-off, while bullish sentiment lowers the volatility, increasing the returns (S. Subramaniam and M. Chakraborty [16]).

The above studies lack in classifying which type of information has resulted in an increase in volatility or return. Further, there is a gap in which strategy can be adopted during these times in emerging markets like India, which is unexplored by earlier studies. The study also included consideration of volume that supports price action, which is found to be absent in many studies. Many researchers (J. Aharony and I. Swary [6]) found that financial news affects stock prices. Latent literature reported that non-financial news also impacts share prices. The underlying link between stock price and factors is discussed below:

Earnings Announcement

Managers communicate their earnings through public announcements, which investors find since they carry inside information (J. Aharony and I. Swary [6]). When made public, non-available information causes stock price movement. Higher earnings have led to higher returns, while lower earnings have the opposite effect. Significant excess return is found on the announcement day or during the announcement week.

Capital Structure

Capital structure refers to a combination of equity and debt. The firm's profitability is greatly affected by the employment of debt capital (U. Menon [17]). The capital structure affects stock prices (J. Singh [18]). The stock price reacts negatively to announcements relating to the issue of equities for debt.

Payout

The payout refers to cash (dividend) and non-cash (bonus) payments to the investors. A dividend reduces reserves and surplus, whereas a bonus is just a book entry (C. Adaoglu and M. Lasfer [19]). The dividend is an important decision for investors and companies as well. It increases the income of the investors while showing the company's future financial planning. Payout news makes stock prices move, resulting in gains (K.H. Al-Yahyaee [20]).

Corporate Strategy and Performance

Corporate strategy is the organization's capability to overcome difficulties to achieve profit and competitive advantage through diversification or multi-business (G. Hubbard and P. Beamish [21]). These strategies affect multiple areas like accounting, operations, HR, marketing and strategic management, thereby improving the organization's performance and leading to affecting the stock prices (L.V. Bernard [22]) positively.

Legal Settlement and Exchange

The companies are responsible for the product malfunctioning or an act. It might result in altering the company's product portfolio or payment of fines. A statistically significant negative abnormal return was observed during filing that disappeared after a short period (M. Klock [23]). The study also highlighted that financial firms in the service sector are more affected than non-financial service firms. These acts affect the future cash flows and current stock prices of the company demonstrating a steep price decline resulting in negative results.

Corporate Actions and Management Changes

These refer to various actions of management that either directly or indirectly affect the shareholders' value. Corporate actions are essential for any organization's survival, growth, and development. It includes decisions related to dividend payment, bonuses, and stock splits that affect the present and future cash flows (D. Lazar and G. Pramod, [24]). The

entry or exit of the CEO (I.F. Kesner and T.C. Sebora [25]), CFO, or COO indicates the company's operational changes. Management changes result in negative returns to the extent of 55%.

Development and Recognition

New product development is key to success. The R&D demands initial cash outflow, resulting in lesser income to shareholders leading to negative price performance. But, once the product is successful and ready to enter the market, it is expected to increase shareholders' value. Such an announcement sends a positive signal to the investor regarding short- and long-term returns. The stock price reactions around such announcements are abnormal and positive (C.M. Crawford [26]).

Recognition and awards, on the one hand, promote a good culture within organizations and, on the other, build a competitive market. The companies are felicitated for their outstanding contributions in many areas like new products, quality and excellent business models. They confirm stock price increases after receipt of recognition or award by companies.

Meetings and Events

Meetings or events refer to unusual happenings or important. In an organization, these are related to the scheduling of financial outcomes and investor meetings. These are the next largest amount of information the companies disseminate. They found a negative cumulative abnormal return to the extent of –0.021% during the company-sponsored event, whereas it is 0.03% and 0.06% for the industry events and investor meets, respectively.

DATA COLLECTION AND ANALYSIS

Data Collection

The scope of the study is limited to BSE SENSEX 30 listed companies on the Bombay Stock Exchange five-years data (www.bseindia.com). No repetitive announcements were considered. In all, 18,014 news items were found during the study period. Further authors have classified news as "financial" and "non-financial" and, at last, "good", "bad", and "indifferent". The stock return, risk, and volatility are computed pre- and post-announcement.

Data Analysis

The 30 listed companies, along with the number of news stories, are presented in *Table 1*. It can be observed that financial news items were only 10.70% while the non-financial news items were 89.30%. The non-financial news dominates the announcements.

To examine changes in the price levels, volatility, and volume in the stock price, there is a necessity of one value that acts as a standard to measure against the price and volume changes. Depending on the dissemination of news timing, a reference value is selected. Then it is used in performing one sample t-test. The results of the t-test are presented in *Tables 2* and *3*.

It is evident from *Table 4* that most of the announcements pertain to capital structure (61%), followed by meetings and events (16%). Payout news is least at 1%. Earning announcements have more effect on stock price, as 62% have been either good or bad. Payouts' also have affected share price for about 56% of the time. Corporate strategy and performance (53%) and corporate actions and management changes (51%) have affected the share price more. The effect of legal settlement and exchange, development and recognition, and meetings and events have the same effect on the stock price.

For 18,014 news volume ratios (stocks traded before the announcement to stocks traded after the news), scrip return, scrip risk and volatility, market return, and market risk and volatility (pre- and post-announcement), respectively, were computed as follows:

Table 1

Financial and Non-Financial News

Company Code	Company	Financial News	Non-Financial News	Total News Items
1	APSEZ	40	179	219
2	APL	38	527	565
3	ABL	195	804	999
4	BAL	28	200	228
5	Airtel	43	302	345
6	CL	33	260	293
7	CIL	32	202	234
8	RLL	55	369	424
9	GAIL	32	204	236
10	HDFCB	48	2331	2379
11	HML	29	209	238
12	HDFCL	173	909	1082
13	HUL	55	155	210
14	ICICI	321	269	590
15	INFY	50	456	506
16	ITC	61	1274	1335
17	L&T	31	426	457
18	LL	128	2218	2346
19	M&M	37	836	873
20	MSIL	22	265	287
21	NTPC	39	269	308
22	ONGC	38	253	291
23	PGCI	30	201	231
24	RIL	67	780	847
25	SBIN	41	216	257
26	SPIL	25	419	444
27	TML	30	435	465
28	TSL	25	246	271
29	TCS	40	631	671
30	WL	148	235	383
Total				18 014

Source: Authors compilations.

Table 2

News Classification

Company code	Type	Good	Bad	Indifferent
1	F	14	17	9
	NF	47	85	47
2	F	8	21	9
	NF	158	267	102
3	F	35	90	70
	F	146	367	291
4	F	11	15	2
	NF	47	102	51
5	F	7	18	18
	NF	78	151	73
6	F	10	7	16
	NF	64	116	80
7	F	13	14	5
	NF	49	108	45
8	F	10	26	19
	NF	121	169	79
9	F	4	16	12
	NF	35	119	50
10	F	15	20	13
	NF	560	1262	509
11	F	9	12	8
	NF	57	82	70
12	F	36	90	47
	NF	200	468	241
13	F	14	27	14
	NF	51	74	30
14	F	66	165	90
	NF	54	140	75
15	F	14	15	21
	NF	116	214	126
16	F	17	31	13
	NF	367	669	238
17	F	11	10	10
	NF	105	205	116
18	F	45	66	17
	NF	604	1173	441
19	F	12	13	12
	NF	179	462	195
20	F	7	7	8
	NF	69	152	44
21	F	8	18	13
	NF	57	149	63
22	F	7	20	11
	NF	65	132	56
23	F	6	16	8
	NF	45	106	50
24	F	15	32	20
	NF	156	398	226
25	F	6	17	18
	NF	55	103	58
26	F	10	10	5
	NF	123	206	90
27	F	12	10	8
	NF	155	189	91
28	F	9	9	7
	NF	73	106	67
29	F	10	8	22
	NF	178	318	135
30	F	41	73	34
	NF	53	130	52

Source: Authors compilations.

Note: F = Financial and NF = Non-Financial.

Table 3

Classified News

News Classification	Financial News Items	Non-Financial News Items	Total
Good	482	4068	4550
Bad	558	3791 (23.57%)	4349
Indifferent	892	8223	9115
Total	1932	16 082	18 014

Source: Authors compilations.

Table 4

News Composition

Type of News	Good	Bad	Indifferent	Total
Earning announcements	177	194	228	599
Capital structure	2745	2555	5654	10954
Payout	47	78	98	223
Corporate strategy and performance	209	205	365	779
Legal settlement and exchange	176	157	354	687
Corporate actions and management changes	363	350	690	1403
Development and recognition	125	110	264	499
Meetings and events	708	701	1461	2870
Total	4550	4350	9114	18,014

Source: Authors compilations.

$$\text{Scrip Trade Volume Ratio (STVR)} = \frac{Volume\,traded\,before\,announcement}{Volume\,traded\,\,post\,announcement}, \quad (1)$$

$$\text{Scrip Return (SRe)} = \frac{\left(Today's\,price - Yesterday's\,price\right)}{Yesterday's\,price} * 100, \quad (2)$$

$$\text{Scrip Risk } (\sigma)\ (\text{SRi}) = \sqrt[2]{\frac{\left(Return - Mean\,return\right)^2}{}}, \quad (3)$$

$$\text{Scrip Volatility } (\beta)\ (\text{SV}) = \frac{n\left(\Sigma x * y^5 - \Sigma x * \Sigma y\right)}{\left(n\left(\Sigma x 2\right) - \left(\Sigma x\right) 2\right.}, \quad (4)$$

where x — Market return, y — Company return, n — Number of observations (5).

$$\text{Market Return (MRe)} = \frac{(\textit{Today's closing points} - \textit{Yesterday's closing points})}{\textit{Yesterday's closing points}} * 100, \quad (5)$$

$$\text{Market Risk (MRi)} = \sqrt[2]{\frac{(\textit{Market return} - \textit{Mean market return})^2}{5}}. \quad (6)$$

Earnings Announcements

The analysis for earning announcements is presented in *Table 5*.

Capital Structure

Financial

The analysis is presented in *Table 6*.

Non-financial

Table 5

Earning Announcements Tabulation

Particulars	Good		Bad		Indifferent	
	Pre	Post	Pre	Post	Pre	Post
SV (β)	Pre: 0.97 & Post: 0.82 (Relatively stable stock; less volatile and riskier than the market)					
STVR	0.95 (5.26% Selling)		0.92 (8.70% Selling)		1.02 (1.96% Holding)	
SRe	0.01%	0.64%	–0.03%	–0.70%	0.05%	–0.02%
Sri	1.97	2.09	1.85	2.02	2.03	2.08
Announcement Outcome	More return, more risk		Less return, more risk		Less return, more risk	
MRe	0.01%	0.10%	–0.01%	–0.17%	0.01%	–0.01%
MRi	0.86	0.91	0.82	0.86	0.86	0.91
Announcement Outcome	More return, more risk		Less return, more risk		Less return, more risk	
Strategy	Profit booking		Stop loss		Wait and watch	

Source: Authors compilations.

Table 6

Capital Structure (Financial) Tabulation

Particulars	Good		Bad		Indifferent	
	Pre	Post	Pre	Post	Pre	Post
SV	Pre: 0.80 & Post: 0.95 **(Relatively stable stock; less volatile and riskier than the market)**					
STVR	1.28 (21.88% Holding)		0.92 (8.70% Selling)		1.02 (1.96% Holding)	

Table 6 (continued)

Particulars	Good		Bad		Indifferent	
	Pre	Post	Pre	Post	Pre	Post
SRe	–0.07%	0.59%	–0.03%	–0.70%	0.05%	–0.02%
SRi	1.71	1.62	1.85	2.02	2.03	2.08
Announcement Outcome	More return, less risk		Less return, more risk		Less return, more risk	
MRe	0.02%	0.27%	–0.01%	–0.17%	0.01%	–0.01%
MRi	0.95	0.80	0.82	0.86	0.86	0.91
Announcement Outcome	More return, less risk		Less return, more risk		Less return, more risk	
Strategy	Partial profit booking		Stop loss		Wait and watch	

Source: Authors compilations.

The analysis is presented in *Table 7*.

Table 7

Capital Structure (Non-Financial) Tabulation

Particulars	Good		Bad		Indifferent	
	Pre	Post	Pre	Post	Pre	Post
SV	Pre: 0.87 & Post: 0.84 **(Relatively stable stock; less volatile and riskier than the market)**					
STVR	1.14 (12.28% Holding)		0.92 (8.70% Selling)		1.02 (1.96% Holding)	
SRe	0.11%	0.55%	–0.03%	–0.70%	0.05%	–0.02%
SRi	1.47	1.42	1.85	2.02	2.03	2.08
Announcement Outcome	More return, less risk		Less return, more risk		Less return, more risk	
MRe	0.07%	0.20%	–0.01%	–0.17%	0.01%	–0.01%
MRi	0.93	0.88	0.82	0.86	0.86	0.91
Announcement Outcome	More return, less risk		Less return, more risk		Less return, more risk	
Strategy	Partial profit booking		Stop loss		Wait and watch	

Source: Authors compilations.

Table 8

Payout Tabulation

Particulars	Good		Bad		Indifferent	
	Pre	Post	Pre	Post	Pre	Post
SV	Pre: 1.11 & Post: 1.09 **(Risky investment; higher than the average risk)**					

Table 8 (continued)

Particulars	Good		Bad		Indifferent	
	Pre	Post	Pre	Post	Pre	Post
STVR	0.95 (5.26% Selling)		1.00 (Unchanged trading)		1.02 (1.96% Holding)	
SRe	0.08%	0.55%	0.15%	–0.73%	0.05%	–0.02%
SRi	1.93	2.27	1.78	2.01	2.03	2.08
Announcement Outcome	More return, more risk		Less return, more risk		Less return, more risk	
MRe	0.10%	0.10%	0.08%	–0.18%	0.01%	–0.01%
MRi	1.01	0.95	0.92	0.94	0.86	0.91
Announcement Outcome	Less risk		Less return, more risk		Less return, more risk	
Strategy	Profit booking		Stop loss		Wait and watch	

Source: Authors compilations.

Payout

The analysis is presented in *Table 8*.

Since there is a higher return due to payouts in the form of dividends, the investors must have sold the shares.

CORPORATE STRATEGY AND PERFORMANCE (CSP)

Financial

Computations about CSP are presented in *Table 9*.

Table 9

CSP (Financial) Tabulation

Particulars	Good		Bad		Indifferent	
	Pre	Post	Pre	Post	Pre	Post
SV	Pre: –0.21 & Post: 0.32 **(Relation with market has reversed; relatively stable)**					
STVR	0.79 (26.58% Selling)		1.51 (33.77% Holding)		1.03 (2.91% Holding)	
SRe	–0.78%	0.84%	–0.38%	–0.96%	–0.23%	0.28%
SRi	1.81	1.84	1.57	1.79	1.48	1.70
Announcement Outcome	More return, more risk		Less return, more risk		More return, more risk	
MRe	0.14%	–0.06%	0.59%	0.30%	0.04%	–0.02%
MRi	1.03	0.86	0.56	0.87	1.01	0.96
Announcement Outcome	Less return, less risk		Less return, more risk		Less return, less risk	
Strategy	Profit booking		Wait and watch		Wait and watch	

Source: Authors compilations.

Non-financial

Computations about CSP are presented in *Table 10*.

Table 10

CSP (Non-Financial) Tabulation

Particulars	Good		Bad		Indifferent	
	Pre	Post	Pre	Post	Pre	Post
SV	Pre: 0.89 & Post: 0.92 **(Relatively stable; less volatile and riskier than the market)**					
STVR	1.06 (5.66% Holding)		1.06 (5.66% Holding)		1.19 (15.97% Holding)	
SRe	0.10%	0.51%	0.15%	−0.67%	0.10%	−0.02%
SRi	1.79	1.72	1.57	1.68	1.75	1.72
Announcement Outcome	More return, less risk		Less return, more risk		Less return, less risk	
MRe	0.07%	0.13%	0.06%	−0.25%	0.03%	0.01%
MRi	0.92	0.88	0.77	0.88	0.88	0.95
Announcement Outcome	More return, less risk		Less return, more risk		Less return, more risk	
Strategy	Partial profit booking		Wait and watch		Wait and watch	

Source: Authors compilations.

LEGAL SETTLEMENT AND EXCHANGE (LSE)

Financial

The financial news was good, and the SV was found to be 2.16 and −2.28 pre- and post-announcement. The STVR was found to be 1.12, meaning more holding. The SRe pre and post were found to be −0.22% and 0.47%. Since the news was good, there must be a return rise. SRi pre and post were 0.85 and 1.03, indicating an increase in risk. Maybe, "more the return, more the risk" situation prevailed. MRe pre and post were 0.02% and 0.44%, indicating a rise in the MRe. MRi has increased marginally from 0.25 to 0.28.

Non-financial

Computed values presented in *Table 11*.

Table 11

LSE (Non-Financial) Tabulation

Particulars	Good		Bad		Indifferent	
	Pre	Post	Pre	Post	Pre	Post
SV	Pre: 0.91 & Post: 0.94 **(Relatively stable stock; less volatile and riskier than the market)**					
STVR	1.20 (16.67% Holding)		1.14 (12.25% Holding)		1.18 (15.25% Holding)	
SRe	−0.08%	0.74%	−0.04%	−0.57%	−0.04%	0.04%
SRi	2.01	1.79	1.76	2.16	1.85	1.91
Announcement Outcome	More return, less risk		Less return, more risk		More return, more risk	
MRe	−0.01%	0.23%	−0.01%	−0.08%	−0.02%	0.05%
MRi	0.99	0.88	0.93	0.98	0.92	0.93

Table 11 (continued)

Particulars	Good		Bad		Indifferent	
	Pre	Post	Pre	Post	Pre	Post
Announcement Outcome	More return, less risk		Less return, more risk		More return, more risk	
Strategy	Partial profit booking		Wait and watch		Wait and watch	

Source: Authors compilations.

CORPORATE ACTIONS AND MANAGEMENT CHANGES (CAMC)

Financial

Computed values are presented in *Table 12*.

Table 12

CAMC (Financial) Tabulation

Particulars	Good		Bad		Indifferent	
	Pre	Post	Pre	Post	Pre	Post
SV	Pre: 0.99 & Post: 1.03 **(Scrip has become riskier)**					
STVR	1.54 (35.06% Holding)		1.23 (18.70% Holding)		1.42 (28.58% Holding)	
SRe	0.01%	0.37%	0.61%	–0.34%	–0.26	–0.03%
SRi	1.77	1.83	1.52	1.57	1.74	1.64
Announcement Outcome	More return, more risk		Less return, more risk		Less return, less risk	
MRe	–0.02%	–0.14%	0.22%	0.13%	0.06%	0.01%
MRi	0.82	0.74	0.68	0.78	0.89	0.84
Announcement Outcome	Less return, less risk		Less return, more risk		Less return, less risk	
Strategy	Partial profit booking		Wait and watch		Wait and watch	

Source: Authors compilations.

Non-financial

Computed values are presented in *Table 13*.

Table 13

CAMC (Non-Financial) Tabulation

Particulars	Good		Bad		Indifferent	
	Pre	Post	Pre	Post	Pre	Post
SV	Pre: 0.91 & Post: 0.89 **(Relatively stable stock; less volatile and riskier than the market)**					
STVR	1.19 (15.97% Holding)		1.11 (9.91% Holding)		1.18 (15.25% Holding)	
SRe	–0.05%	0.57%	0.07%	–0.60%	0.03%	0.04%
SRi	1.70	1.68	1.70	1.67	1.64	1.67
Announcement Outcome	More return, less risk		Less return, less risk		More return, more risk	
MRe	0.05%	0.22%	0.06%	–0.18%	0.04%	0.03%
MRi	0.92	0.89	0.86	0.90	0.90	0.93

Table 13 (continued)

Particulars	Good		Bad		Indifferent	
	Pre	Post	Pre	Post	Pre	Post
Announcement Outcome	More return, less risk		Less return, more risk		More return, more risk	
Strategy	Partial profit booking		Wait and watch		Wait and watch	

Source: Authors compilations.

DEVELOPMENT AND RECOGNITION

Computed values are presented in *Table 14*.

Table 14

Development and Recognition Tabulation

Particulars	Good		Bad		Indifferent	
	Pre	Post	Pre	Post	Pre	Post
SV	Pre: 0.67 & Post: 0.68 **(Relatively stable stock; less volatile and riskier than the market)**					
STVR	1.50 (33.33% Holding)		1.11 (9.91% Holding)		1.17 (14.53% Holding)	
SRe	−0.14%	0.44%	0.12%	−0.51%	0.07%	0.01%
SRi	1.37	1.20	1.62	1.52	1.44	1.51
Announcement Outcome	More return, less risk		Less return, less risk		Less return, more risk	
MRe	−0.04%	0.13%	0.06%	−0.17%	−0.01%	−0.06%
MRi	0.85	0.82	0.93	1.00	0.85	0.93
Announcement Outcome	More return, less risk		Less return, more risk		Less return, more risk	
Strategy	Partial profit booking		Wait and watch		Partial profit booking	

Source: Authors compilations.

MEETINGS AND EVENTS

Financial

Computations are presented in *Table 15*.

Table 15

Meeting and Events (Financial) Tabulation

Particulars	Good		Bad		Indifferent	
	Pre	Post	Pre	Post	Pre	Post
SV	Pre: 0.15 & Post: 0.19 **(Relatively stable stock; less volatile and riskier than the market)**					
STVR	1.16 (13.79% Holding)		1.14 (12.28% Holding)		0.83 (20.48% Selling)	
SRe	0.12%	0.43%	0.36%	−0.34%	−0.31%	−0.14%
SRi	1.54	1.44	1.21	1.26	1.60	1.53
Announcement Outcome	More return, less risk		Less return, more risk		Less return, less risk	
MRe	0.12%	0.14%	0.34%	0.12%	−0.17%	0.06%

Table 15 (continued)

Particulars	Good		Bad		Indifferent	
	Pre	Post	Pre	Post	Pre	Post
MRi	0.99	0.86	0.96	0.58	1.30	1.19
Announcement Outcome	More return, less risk		Less return, less risk		More return, less risk	
Strategy	Partial profit booking		Wait and watch		Stop loss	

Source: Authors compilations.

Non-financial

Computations are presented in *Table 16*.

Table 16

Meeting and Events (Non-Financial) Tabulation

Particulars	Good		Bad		Indifferent	
	Pre	Post	Pre	Post	Pre	Post
SV	Pre: 0.87 & Post: 0.86 **(Relatively stable stock; less volatile and riskier than the market)**					
STVR	1.14 (12.28% Holding)		1.08 (7.41% Holding)		1.25 (20.00% Holding)	
SRe	0.01%	0.57%	0.09%	–0.61%	0.03%	0.04%
SRi	1.63	1.64	1.70	1.71	1.69	1.68
Announcement Outcome	More return, more risk		Less return, more risk		More return, less risk	
MRe	0.03%	0.23%	0.06%	–0.20%	0.03%	0.04%
MRi	0.93	0.90	0.87	0.95	0.95	0.95
Announcement Outcome	More return, less risk		Less return, more risk		More return, no change in risk	
Strategy	Partial profit booking		Wait and watch		Wait and watch	

Source: Authors compilations.

RESULTS AND DISCUSSIONS

Based on the literature, announcements are classified under eight headings and further as financial and non-financial. Of them, earning announcements and payouts are purely financial news, while development and recognition are purely non-financial news. The other five types have both financial and non-financial news. Each news item is further classified as good, bad, and indifferent to understand the investors and market behaviour.

Earning announcements, financial news, are important to investors as they provide highly informative contents. These announcements post news resulted in a decline in volatility. Our results are consistent with other studies (A. Eilifsen et al. [27]). When the news is good (return change: 0.01% to 0.64%), trading of the shares has increased. Since the returns have increased, the investors "booked the profit". When the news is bad, trading of the shares has further increased compared to good news, as documented in the literature (W.M. Cready and D.N. Hurtt [28]). The market return has decreased and investors have resorted to the "exit and re-entry" strategy. Scrip returns and market risks have decreased, and increased respectively. A. Gupta [29] found similar results that the price reaction in the case of bad news is much larger than that of good news.

Capital structure financial announcements have resulted in an increase in volatility. As found by resulting in a reduction of shares traded. The good news has resulted in increase in scrip return with decrease in risk as evidenced (J.K.S. Pynnönen [30]). The investors have opted for "growth and income" or "uncommon profit" strategies. The market has also exhibited the same behaviour. Bad news resulted in lesser trading. But, this trading is higher than when the

news is good. In such instances, the scrip returns decreases and hence, the investors may have opted for "limiting the risk" strategy.

Capital structure non-financial announcements have resulted in a decline in volatility, indicating lesser fluctuations than the SENSEX. The trading of shares post "good" announcements is less. The announcements have resulted in increase in scrip returns and decrease in risk. It appears that the investors resort to "uncommon profit" under such situations. Bad news has resulted in less trading. Scrip return has decreased and risk has remained almost the same. The investors must have applied a "wait and watch" strategy. Market return has declined and risk has marginally increased. The indifferent news announcements have resulted in less trading. Scrip and market returns have declined with marginal increases in risk. The investors must be waiting for "trend reversal".

Payout announcements have decreased the scrip volatility, indicating lesser fluctuations in scrip return compared to SENSEX in line with major studies (C. Carroll and H. Manakyan, [31]). Good news items have resulted in more trading post announcement with an increase in risk. The investors have 'booked the profit'. This could be due to an increase in wealth. The volume of trading has remained unchanged post bad announcements, similar to other findings. The scrip and market return have decreased with the increase in risk, as documented by (R. Mestel and H. Gurgul [32]). Indifferent announcements have resulted in holding, unlike the bad and good news. Scrip return has decreased with marginal increase in risk, while market return has decreased with marginal decrease in risk.

Corporate strategy and performance financial announcements increased volatility, indicating increased fluctuation in scrip returns. Post good news announcements, return increases (R. Reed and R.J. DeFillipi [33]) and the trading of the shares increases with a marginal increase in risk. The investors "booked the profit". Market loss has decreased with decrease in risk. With bad announcements, the trading decreased by 35%. Investors adopted the "averaging" strategy. Indifferent news resulted in lesser trading, higher returns, and higher risk. Investors adopted an "aggressive" strategy.

Corporate strategy and performance non-financial news has resulted in a marginal increase in volatility, indicating an increase in scrip return. Good news items have resulted in lesser trading with a lower scrip risk. Investors adopted a "partial profit booking" strategy. Market return has increased with a decrease in risk. Trading volume decreased in case of bad news also. Scrip return has decreased, resulting in loss with an increase in risk. "Averaging" strategy employed by investors. Market return has decreased with higher risks. Indifferent news has resulted in lesser trading, decrease in returns with a marginal decrease in scrip risk. A "wait and watch" strategy is employed here. Market return has decreased with increase in risk.

Legal settlement and exchange financial news resulted in higher volatility and in the opposite direction of the market. Good financial announcements have resulted in lesser trading with higher returns and risk. Legal settlements have a positive impact on the stock price movement, as studied by (D.P. Francis and K. Schipper [34]). "Partial profit booking" strategy has been employed. Market returns and risks have increased. During the study period, no bad or indifferent news was announced.

Legal settlement and exchange non-financial news resulted in marginal increase in volatility. Good news items resulted in lesser trading with higher returns and lower risks. Our results on volatility, trading, returns, and risks are consistent with other. "Profit booking" strategy is employed. Bad announcements have resulted in lesser trading. The losses increased with higher risk. Indifferent news resulted in lesser trading with higher returns and risk. Market returns increased with marginal increase in risk.

Corporate actions and management changes financial news resulted in increase in volatility indicating more scrip return volatility than the market. Scrip trading after good news decreased by 35%. Scrip returns increased with increase in the risk (M. Jensen [35]). "Wait and watch" strategy is adopted by investors. Bad news reduced trading activities by about 20%. Scrip returns decreased and has resulted in loss with marginal increase in risk. Investors adopted "Limiting risk" strategy. Indifferent news has reduced the trading by about 30%. The scrip return has increased and risk has reduced. It appears that the investors have adopted "averaging" strategy. Market return and risk have decreased.

Corporate actions and management changes non-financial news observed decrease in volatility. Good news has decreased trading by 16%. Scrip return has increased from loss to profit with marginal decline in risk. It appears that the investors have adopted "partial profit booking" strategy. Market return has increased with marginal decrease in risk. Bad news has also reduced the trading

activities by 10%. The return has decreased with marginal decrease in risk. It appears that the investors have adopted "averaging" strategy. Market return has decreased with marginal increase in risk. Indifferent news has reduced the trading activities by 16%.

Development and recognition non-financial news has increased volatility marginally. It has reduced the trading activities by 34%. The return has increased and the risk has decreased (K.B. Hendricks and V.R. Singhal [36]). The investors' strategy could be "uncommon profit". Bad announcements have also reduced trading activities. Scrip returns and risk have decreased. Investors must have adopted "wait and watch" strategy. Market return has decreased with increase in market risk. Indifferent news has also reduced the trading activities. These announcements have resulted in decreased return with increase in risk. "Averaging" probably the strategy adopted by investors.

Meeting and events financial news has resulted in increase in volatility. Good news has reduced the trading activities with increase in return and decrease in risk. "Partial profit booking" might have been adopted by investors. Market returns has increased with decrease in market risk. Bad announcements have resulted in reduction in trading activities. The return has declined and resulted in losses. The risk has increased. "Wait and watch" probably has been employed by investors. Market return and risk have decreased. Indifferent announcements increased the trading activities while the return has decreased but still in losses. Decrease in scrip risk is also noticed. "Buy on dips" strategy has been employed by investors.

Meeting and events non-financial news has not affected the volatility. Good news has reduced the trading with increase in return and marginal increase in risk. "Partial profit booking" must have been employed by investors. Market return has increased with marginal decrease in risk (K. Shruthi, and S. Patil, [37]). Bad news has reduced the trading activities. Return has declined and resulted in losses. The risk has marginally increased. "Averaging" probably the strategy adopted by investors. Lesser Market return resulted in losses with rise in risk. Indifferent has also declined trading activities. There is marginal increase in return and marginal decrease in risks. "Wait and watch" probably has been employed by investors.

CONCLUSIONS

From the analysis of 18,014 news items spread over 5 years, it can be asserted that news has always affected the scrip volume traded on BSE, Mumbai. Of them, non-financial news was 89.30% while financial news items were only 10.70%. 50% of the news items don't have any significant effect on the stock price. The financial news has more negative effect on the stock price than the positive effect. But, non-financial news has more positive effect than the negative effect. The investors in 5 days follow different strategies. When news is good investors were found to adopt "partial profit booking" strategy and expect the prices to soar further, as news is favourable. For bad news investors have limited the losses by adopting "stop loss" or took time to decide and employed "wait and watch" strategy. When news lacks in providing direction of the price change i.e., indifferent, the investors took time to decide and follow "wait and watch" strategy.

Theoretical Implications

The classification of published news in eight heads and further classification as "good", "bad", and "indifferent" is a novel contribution of the study. Further, the strategies adopted by the investors in such phenomenon is not evidenced in the literature. Study enriches the present literature and fills the gap thereby contributing to niche body of knowledge in the area of stock prices and strategies adopted by the investors.

Managerial Implications

This will help the corporates to time the information dissemination. Further, the fund houses existing traders and prospective investors who are new to the stock market would also be benefited in strategizing the trade that aims at minimum losses and higher gains.

Limitations and Scope for Future Research

Stocks that are listed on BSE SENSEX — 30 companies.

Micro-economic news items considered.

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