Title: Impact of Quarterly Results on Share Prices 'An Analytical study of Automotive Companies'

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Abstract:

Quarterly results are an important factor for studying the movement of share prices in the stock market. The aim is to find out the impact of Quarterly Results on the Share Prices of the companies listed in the S&P BSE AUTO index. The need of the study arises due to the recent wide fluctuations in the Stock Prices of the automotive industry in India. The scope is confined to 13 companies listed under S&P BSE AUTO index for second Quarter of the financial year 2014-2015. The independent sample T-Test was applied to find out the significant difference between the Share Prices before and after the quarterly result announcement. The Correlation between the Share Price and Sensex is analyzed to understand the real effect of quarterly results on the Share Prices. The returns from the Share Prices and the returns from the Sensex were calculated to find out the nature of returns. Secondary data was collected from the BSE Website for the purpose of the study. For T-Test, 10 out of 13 companies showed significant difference between the Share Prices before and after the quarterly result announcement. 10 out of 13 companies showed significant relationship between the Share Price and Sensex movements. The returns of Share Prices and Sensex when compared showed abnormality for all the companies except Bajaj Autos. Nine companies showed the impact of quarterly result announcement on their Share Prices. Two companies showed an impact due to the movement of Sensex and two because of other macroeconomic factors. Therefore, the study concludes that the Quarterly Result announcement had an impact on the Share prices of the companies.

Keywords: Financial Market, Security Market, Quarterly Returns, Share Prices, Sensex

1. INTRODUCTION

Quarterly reports are extended version of the annual reporting mechanism on a more regular basis. Investors consider these interim financial reports more important than annual financial information which allows them to analyze the actual performance on periodic basis and also review their projections. Interim reports leads to more appropriate price discovery and minimize possibility of leakages of financial information. Stock market reacts more spontaneously to information made available in quarterly reporting. The main aim of publishing financial results is to provide beneficial and relevant information to all the stockholders. All over the world, investors as well as academicians favor such a quarterly report as it provides them timely and reliable price sensitive information.

1.1 Objectives of the study

- > To understand the price fluctuations in the shares of the selected Automobile companies during the pre and post result period
- > To find out the relationship between Sensex movements and share price movements so as to understand the real effect of quarterly results on share prices.

2. REVIEW OF LITERATURE

(May, 1971) studied the influence of quarterly earnings announcement on investors decision on the basis of change in stock price s. Data of 105 firms during the period 1965-1967 was collected from ISL Index, Wall Street Journal Index (American Stock Exchange). Z test Statistical tool and ratios were used to calculate magnitude and compare price-change responses which concluded that quarterly announcements are significant and are used by investors in decision making.

(Jordon, 1973) analyzed new quarterly earnings announcement impacts on stock prices and how stock prices adjust to the quarterly earnings information. The data of randomly selected 45 companies during the period 1963-1968 was taken from Forbes 21st Annual report on American industry. Mean and mean absolute was calculated which revealed that each quarter announcements impacts market differently.

(Kross & Schroeder, 1984) analyzed the relationship between quarterly announcement timing and the kind of news reported, and the co-relation between stock returns with the timing of the profits announcement date. Total sample included 297 NYSE and American stock exchange firms and after applying filters 3564 observations were made for 12 quarters. The results showed that early quarterly earnings announcements have better abnormal returns as compared to late announcements.

(Ariff, C, Chew, & Chew, 1997) studied the relationship between earnings and share price with the hypothesis of direct relation between risk-adjusted abnormal returns and

unexpected earnings changes. The study used data for the period from January 1981 to December 1992. The results showed that the unexpected change in the earnings are significantly related with share price changes but the level of the earnings effect is not as pronounced as those told in the more analytically-intensive developed stock markets.

(Odabasi, 1998) investigated the security returns reaction to earnings announcements on Istanbul stock exchange on a portfolio of 92 stocks which made more than 600 earnings announcements from June 1992 to June 1995. A Simple expectation model was used to examine the change in stock price around the announcements by assigning "Good news" and "Bad news" to each subsample. The result indicated that the magnitude of the price change was larger on the announcement day than during the non- event period

(Soltes, 2012) studied the impact of quarterly results on the share prices in U.S, German and Czech stock market by comparing the declared results with the analysts forecast published at Thomson Reuters and Bloomberg. The study statistically validated the dependency relationship between the results and share prices by testing a total of 75 shares of U.S. stock market, 23 of German and 8 for Czech market. Liner regression and GARCH model were used for testing. The study concluded the validated dependence only in U.S stock market.

(Sharma & Khanna, 2013) studied the overall market behavior for 12 quarters from years 2008 to 2011. BSE sectoral indices and BSE Sensex benchmark were used to judge the movements of the market as per the different sectors. Granger Causality test was used to explore the causal link between stock market benchmark and sectoral index. The study concluded that almost all sectoral indexes have significant relationship with Sensex and different indexes have different type of causal relationship.

(Babu & kasilingam, 2013) studied the effect of interim results on share prices of selected securities on the BSE index.

Data of 20 companies listed on BSE was collected. Independent sample T-test and correlation were used in the study. The research

concluded that though there was an increase in prices after the results but it was due to market conditions rather than quarterly reporting announcements.

(**Prakash**, **2013**) analyzed the market reaction to the announcement of firms earning. The study was conducted on 15 companies listed in CNX NIFTY of NSE during the period from 1st April 2008 to 31st March 2010 and the data was collected from official website of NSE. Average abnormal returns, average security returns variability, cumulative abnormal returns and cumulative average abnormal returns tests were used and concluded that market is reactive to the announcement of earning information.

(Saravanakumar & Mahadevan, 2013) studied the behaviour of stock prices around quarterly earnings announcements in the pre and post announcement period. Samples were taken from 50 NSE listed companies for quarter one of October 2010 to December 2010. The period was limited to 32 days and return was calculated for 31 days. The results showed that shareholders earned negative returns during pre-announcement period, a little on day of trading and a slight return in post announcement period.

(Aboagye & Opoku, 2013) examined the effect of earnings announcement of 10 companies listed on Ghana Stock Exchange by analyzing changes in share prices for the period from January 2010 to June 2013. Purposeful and judgmental sampling method was employed to select the target sample. Inferential and descriptive statistics were used to test for significant effect of announcement on share prices. The results showed that earnings announcement has no major effect on share prices at the time of the announcement as well as after the announcements.

3. RESEARCH METHODOLOGY

The study is based on secondary data only. The data has been collected from the websites of the company, economic times and the BSE website. The data has been collected for 13 companies listed in the S&P BSE AUTO Index for second quarter of financial year 2014-2015. The fluctuations of the market price has been found out by comparing the closing market prices with the closing market prices of the previous trading day.

Independent sample T-Test is conducted to determine the impact of interim results on the share prices of the Automobile companies.

Correlation tool has been used to find out the relationship between Sensex movements and share prices movements.

3.1 Hypothesis

 H_0 = There is no significant impact of Quarterly results on the share prices. .

 H_1 = There is significant impact of Quarterly results on the Share Prices.

4. RESULTS AND DISCUSSION

4.1 Interim Result Impact on Share Prices

To determine the impact of interim result announcement on the share prices, independent sample t-test was performed and the mean share prices before and after the interim results were compared. The results are presented in the table below.

Table 1: cumulative table showing mean values and T-test Significance

Mean values and T-test Significance

Independent sample t-test

Company	Before result Mean share	After result mean share	Sig. Value
	price	price	
Bharat Forge	770.62	885.74	.000
Eicher Motors	12653	14217	.000
M&M	1260.1	1254.2	.478
Maruti Suzuki	3079.9	3320.7	.000
MRF	32148	35979	.000
Tata Motors	528.79	528.90	.973
Cummins India	715.98	847.57	.000
Hero Motorcorp	2848.8	3029.7	.000
Exide India	168.84	156.82	.000

Bosch	15126	17544	.000
Motherson Sumi	416.23	432.17	.002
Apollo Tyres	223.94	230.08	.083
Bajaj Auto	2348.8	2473	.000

Source: BSE Website

Table 1 shows that depicts that there was a significant difference in the share prices before and after the release of the interim report for Bharat Forge, Eicher Motors, Maruti Suzuki, MRF, Cummins India, Hero Motocorp, Exide India, Bosch, Motherson Sumi, and Bajaj Autos. The significant values are more than 0.05 for M&M, Tata Motors and Apollo Tyres. This means that interim results had an impact on share prices for 10 companies out of 13.

4.2 Relationship Between Share Prices And Sensex Movements

To find the relationship between the share price movement and the market movement correlation analysis is performed.

Correlation analysis will show the degree of relation between the share prices and sensex.

Table 2: correlation analysis

Relationship between Share Price Movement and Movement of the Sensex

Company	Sig. Value		
Bharat Forg	.000		
Eicher Motors	.000		
M&M	.539		
Maruti Suzuki	.000		
MRF	.914		
Tata Motors	.979		
Cummins India	.000		
Hero Motor Corp	.001		
Exide India	.016		
Bosch India	.000		
Motherson Sumi	.000		
Apollo Tyres	.007		
Bajaj Autos	.000		

Source: BSE Website

Table 2 indicates that the significant value for the correlation coefficient is less than 0.05 for Bharat Forge, Eicher Motors, Maruti Suzuki, Cummins India, Hero Motocorp, Exide India, Bosch, Motherson Sumi, Apollo Tyres, and Bajaj Autos. The significant values are more than 0.05 for M&M, Tata motors and MRF.

4.3 Returns Of Share Prices And Sensex Movements

To find out the actual reason behind the fluctuations in share prices of the auto index companies, returns of share and returns of sensex are calculated and compared to find out whether the returns show abnormality or not, and why.

Table 3: showing returns of shares and sensex

Returns of Share Prices and Sensex Movements

Company	Date of result declaration	Returns of Share	Returns of Sensex	Conclusive Remarks
Bharat Forge	2 NOV 2014	-0.049 (3 NOV 2014)	-0.019 (3 NOV 2014)	Abnormal Returns
Eicher Motors	12 NOV 2014	0.175 (3 NOV 2014)	-0.243 (3 NOV 2014)	Abnormal Returns
M&M	31 OCT 2014	-2.673 (3 NOV 2014)	-0.019 (3 NOV 2014)	Abnormal Returns
Maruti Suzuki	30 OCT 2014	2.967 (31 OCT 2014)	1.899 (31 OCT 2014)	Abnormal Returns
MRF	26 NOV 2014	0.428 (27 NOV 2014)	0.185 (27 NOV 2014)	Abnormal Returns
Tata Motors	14 NOV 2014	4.066 (17 NOV 2014)	0.467 (17 NOV 2014)	Abnormal Returns
Cummins India	6 NOV 2014	8.024 (7 NOV 2014)	-0.169 (7 NOV 2014)	Abnormal Returns
Hero Motorcorp	16 OCT 2014	3.053 (17 OCT 2014)	0.419 (17 OCT 2014)	Abnormal Returns
Exide India	20 OCT 2014	-4.565 (21 OCT 2014)	0.551 (21 OCT 2014)	Abnormal returns
Bosch	11 OCT 2014	2.439 (12 NOV 2014)	0.354 (12 NOV 2014)	Abnormal Returns
Motherson Sumi	10 NOV 2014	1.607 (11 NOV 2014)	0.126 (11 NOV 2014)	Abnormal Returns
Apollo Tyres	11 NOV 2014	3.112 (12 NOV 2014)	0.354 (12 NOV 2014)	Abnormal Returns
Bajaj Autos	15 OCT 2014	-1.956 (16 OCT 2014)	-1.328 (16 OCT 2014)	Normal Returns

Source: BSE Website

Table 3 indicates Returns from Share Price and Sensex movement are abnormal for Bharat Forge, Eicher Motors, M&M, Maruti Suzuki, MRF, Tata Motors, Cummins India, Hero Motorcorp, Exide India, Bosch, Motherson Sumi, and Apollo Tyres and Normal for Bajaj Autos only.

5. CONCLUSION

The share prices of all securities went up after the result, with the exception of M&M and Exide India. The independent sample T-Test shows a significant rise in share prices after the announcements of quarterly results. Out of the 13 companies 10 companies showed significance value less than 0.05 which indicates that there was a significant

difference between the share prices of these companies before and after the quarterly result announcement. The Pearson correlation shows a significant relationship between the movement of share prices and Sensex. The significance value of correlation coefficient indicates that there significant relationship between the share price and Sensex movements of 10 companies out of 13. The returns of share prices and Sensex when compared showed abnormality for all the companies except Bajaj Autos. Bharat Forge, Eicher Motors, Maruti Suzuki, MRF, Cummins India, Hero Motocotp ,Exide India, Bosch, Motherson Sumi showed the impact of quarterly result announcement on their share prices. The share prices of Apollo Tyres and Bajaj Autos showed a rise due to the movement of Sensex. The share prices of M&M and Tata motors showed fluctuations due to other macroeconomic factors not considered in our study. Therefore, the study concludes that the Quarterly Result announcement had an impact on the Share prices of the companies.

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