# Impact Of Quarterly Results On Share Prices 

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#### Abstract

The purpose of the present study is to find out the effect of quarterly results on share prices of securities. The Independent sample T-test was employed to compare the prices of stocks before and after the announcement of the quarterly results by the companies. The correlation between share price and Sensex was also analyzed to find out whether change in price is due to change in the market index. The change in prices was also compared to an increase in profits reported in the quarterly results. The study results show that there was an increase in price after the result, and that an increase in price is mainly due to market conditions rather than the announcement of quarterly results. The increase or decrease in share prices was not reflected in the growth in profits announced in the quarterly results.


Keywords: Quarterly Results, Stocks, Market Index, Profit, Sensex
JELClassification: G14

## INTRODUCTION

As per the listing agreement, every company has to report the quarterly results within one month from the end of the quarter. The objective of interim reporting is to inform the position of the company to its investors or shareholders. Timely and reliable interim reporting improves the ability of investors, creditors, and others to understand an enterprise's capacity to generate earnings and cash flows, its financial condition and liquidity. Based on the information available from the results, the investors can take informed decisions. However, on many occasions, the prices of the securities have not changed to the extent of rise or fall in profit reported in the quarterly results. Hence, there is a need to know the real impact of quarterly results on share price movement of securities.

## OBJECTIVES OF THE STUDY

The main objective of the study is to find out the effect of interim results on market price of securities. The other objectives are as follows:

* To understand the price fluctuation in the shares of the selected 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.
$\star$ To find out the relation between growth in results of the company and changes in the share prices.


## REVIEW OF LITERATURE

Pathak and Das (2008) examined the return behavior of a sample of firms experiencing a common type of event, for e.g., earning announcement, stock split, issue of new debt or equity, merger and acquisition and so on. The objective was to assess the significance of the economic event on the market value of the firm. This paper investigated the impact of quarterly earnings announcements on the stock price movement of the firms constituting the BSE-Sensex. Daily return data was used to study the mean stock price effect. The effect of clustering of events was accommodated to analyze the effect of announcements. The study also examined the drifting up of share prices with reference to 'good announcements' and 'bad announcements'.
Wael (2004) examined market behaviour around the time of annual earnings announcements made in the Paris Bourse. Accordingly, he studied both the informational role of accounting numbers and the intraday speed of adjustment of stock prices to new information. The sample was composed of 117 overnight announcements published among

[^0]Reuters monitors during the period from 2001-2003. For every date, the event was classified into one of the three categories: good news, bad news or no news. This split was made by comparing the actual number to financial analysts' expectations. The intraday analysis revealed several results. First, according to the thesis of Kim and Verrecchia (1994), the spread remains large after the release of unanticipated earnings announcements. During this period, spread widening is accompanied by abnormal market activity. Second, abnormal returns earned by sophisticated investors dissipate within fifteen minutes. Next, prices converge to equilibrium more quickly for good news than for bad news. Finally, they found evidence of price reversal after thirty minutes following the bad news announcement, as predicted by Ziebart (1998).
Vieru (2000) studied the impact of interim earnings announcements on the permanent price effects of trades on the Helsinki stock exchange. This study examined whether the permanent price effects of individual trades are greater before or after an interim earnings announcement on the Helsinki Stock Exchange. If the permanent price effects are greater before the announcement, this would suggest that investors believe that some traders are better informed before the interim earnings announcement than after. Using permanent price effects as a measure of price adjustment for private information, tests were performed to see whether price adjustments are greater in pre-announcement periods than in post-announcement periods. The results suggested that large trades do indeed produce greater permanent price effects before an announcement than after it. For small trades, the results were insignificant.
Baber and Kang (2001) investigated the consequences of earnings management by analyzing stock price reactions to on-target quarterly earnings announcements (earnings that coincide with analysts' consensus expectations) during 1993-1999. They used techniques advanced in Jones (1991), Kang and Sivaramakrishnan (1995), and Collins and Hribar (2000) to distinguish observations where firms apparently managed earnings in order to meet expectations. They found that mean security returns during the earnings announcement period were $0.18 \%$ to $0.91 \%$ less for observations where firms apparently increased earnings than for those where firms apparently decreased earnings to meet expectations. These differences were statistically significant at conventional levels. They also found that returns during the earnings disclosure period varied inversely with the extent that firms appeared to manage earnings upward. Otogawa (2003) investigated the information asymmetry and market liquidity around the quarterly earnings announcements by focusing on the bid-ask spreads and quoted depths. Prior theoretical research has indicated that information asymmetry is exacerbated and market liquidity is reduced just before and at the point of public information disclosure, and that information asymmetry is improved, and market liquidity is enhanced by disclosing public information. Using the transaction data of 121 firms that implemented quarterly earnings reporting during 2001, the author found that there were significant decreases in daily bid-ask spreads and slight increases in daily depths during the period just after the release of the quarterly earnings, which were consistent with the prediction based on prior theoretical studies.
Szyszka (2001) studied market reaction to announcements of quarterly earnings. He observed that information content of quarterly reports is accordingly reflected in stock prices, as theoretically implied by the Efficient Market Hypothesis. He focused on the small emerging markets in Poland, and searched for the post-announcement drift of abnormal returns, similar to the one observed in well-developed and mature world markets. The clearest finding of the paper was the significant post-announcement drift of negative abnormal returns in a group of companies that unexpectedly reported highly disappointing quarterly earnings.
Iqbal and Mallikarjunappa (2009) examined announcement effects of the stock market quarterly earnings announcement. Event study methodology was used to analyze the data, and the sample consisted of 152 companies with minimum 20 percent foreign holdings and it was divided into good news, bad news and overall portfolios. The researchers concluded that stock market reaction to the earnings announcements was very slow.
Selvam, Babu, Indhumathi and Kogila (2010) analyzed the share price reaction towards dividend announcement in the Indian capital market. The data consisted of 35 companies from different sectors. The Capital Asset Pricing Model (CAPM) and market model was employed to analyze the impact. The authors concluded that there is a positive impact of dividend announcement on the share prices.
Lazar and Pramod (2010) attempted to study the influence of corporate actions (such as Bonus issues, Dividend, Rights issue, Splits, Mergers, and Acquisitions etc.) on share prices. Wilcoxon Matched Pairs Test was adopted to analyze 80 companies listed on the BSE and twelve types of corporate actions were identified. The study concluded that corporate actions play an important role in determining the share prices of companies.

## RESEARCH METHODOLOGY

The present study is based on secondary data only. Secondary Data was collected from company reports and the BSE website. The data was collected for twenty companies which are listed on the BSE, out of which ten companies are included in the Sensex list. The companies were selected based on interim reports published in The Economic Times from July 10,2009 to July 31, 2009. The companies were selected to represent various industries such as IT, Steel, Automobile, Pharmaceutical, Cements, Telecommunication, etc. The fluctuation of the market price was found out by comparing closing market prices with the closing market prices of the previous trading day. Fluctuations during the trading day were not considered.

## HYPOTHESES

* The interim results have an impact on the share price of a company.
* The growth in profit reported in the results will be reflected in the share price of the companies.


## IMPACT OF RESULTS ON SHARE PRICES

To determine the impact of interim results on the share price of ABC India Ltd., the independent sample t-test was performed. The Table 1 shows that the average price of the shares of ABC India Ltd. before the interim results announcement was ₹ 35.285 and share price after the announcement was ₹ 38.55 . The mean values clearly indicate that there was a rise in share price after the announcement of the quarterly results.

Table 1: Share Price Before and After The Announcement of Results for ABC India Ltd.

|  | PERIOD | N | Mean | Std. Deviation | Std. Error Mean |
| :--- | :---: | :---: | :---: | :---: | :---: |
| SHARE PRICE | Before | 10 | 35.2850 | 1.48960 | .47105 |
|  | After | 10 | 38.5500 | 3.13156 | .99029 |

Source: BSE website

| Table 2: T-Test for ABC India Ltd. |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  | $\mathbf{t}$-test for Equality of Means |  |  |  |  |
|  |  | $\mathbf{t}$ | Df | Sig. (2-tailed) |  |
| Share Price | Equal variances assumed | -2.977 | 18 | 0.008 |  |
|  | Equal variances not assumed | -2.977 | 12.874 | 0.011 |  |
| Source: BSE website |  |  |  |  |  |


| Table 3: Share Price Before and After The Announcement of Results For LIC Housing Finance Ltd. |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Period | N | Mean | Std. Deviation | Std. Error Mean |
| Share Price | Before | 10 | 607.94 | 21.149 | 6.688 |
|  | After | 10 | 604.95 | 17.441 | 5.515 |
| Source: BSE website |  |  |  |  |  |


| Table 4: T-Test for LIC Housing Finance Ltd. |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: |
|  | $\mathbf{t - t e s t}$ for Equality of Means |  |  |  |
|  |  | $\mathbf{t}$ | Df | Sig. (2-tailed) |
| Share Price | Equal variances assumed | 0.345 | 18 | 0.734 |
|  | Equal variances not assumed | 0.345 | 17.370 | 0.734 |
| Source: BSE website |  |  |  |  |

The Table 2 indicates the significance value of $t$-test for the difference in share price of ABC India Ltd. , which is 0.008 , that is less than 0.05 . This indicates that there was a significance difference between the prices of the share before and after the interim results' announcement. Hence, it can be inferred that the interim report announcement had an impact on the share price.
It can be inferred from the Table 3 that the average price of the share of LIC Housing Finance Ltd. before the interim results was ₹ 607 and the average price of the share after the announcement of the results was ₹ 604 . This means that the price came down after the results. The standard deviation was high during both the periods, which means that there was a violent fluctuation in the price of the share during the study period. The Table 4 reveals that the significance value for the $t$-test is 0.734 , which is greater than 0.05 . This means that there is no difference between the two mean values. This further means that average price of the share of LIC Housing Finance Ltd. before the announcement of the results was not significantly different from the average price of the share after the results. Hence, the results did not have any impact on the share price of LIC Housing Finance Ltd.
The Figure 1 depicts the price movement of CIPLA share during the study period. The arrow indicates date announcement of the results. No clear trend was observed after the results. There was a wide fluctuation in price,


| Table 5: Mean values and T-test significance |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | INDEPENDENT SAMPLE T-TEST |  |  |  |
| Company | Before result Mean share price $n$ | After result Mean share price | Sig. Value |  |
| ABC India Ltd. | 35.28 | 38.55 | 0.008 |  |
| LIC Housing Finance Ltd. | 607.94 | 604.955 | 0.734 |  |
| MRF Ltd. | 3373.85 | 4607.55 | 0.000 |  |
| Canara Bank | 255.17 | 276.38 | 0.001 |  |
| Bharat Forge Ltd. | 144.775 | 211.335 | 0.000 |  |
| CIPLA Ltd. | 279.93 | 277.01 | 0.146 |  |
| HCL Technologies | 266.635 | 304.835 | 0.000 |  |
| India Cements Ltd. | 141.66 | 141.45 | 0.940 |  |
| Sesa Goa Ltd. | 227.92 | 243.1 | 0.001 |  |
| Patni Computer Systems | 281.73 | 361.6 | 0.000 |  |
| Source: BSE website |  |  |  |  |

especially after the results. The average share price before the interim report announcement was ₹ 279.93 and after the announcement, the share price was ₹ 277.01 . The mean values indicate that there was a negative difference in the price of the share before and after the interim report announcement. Thus, the interim report had no impact on the share price of CIPLA. The Table 5 shows that the share prices of all the securities went up after the results, with the exception of LIC Housing Finance Ltd. and CIPLA.
From the Table 5, it can also be inferred that there was a significant difference in the share prices before and after the release of the interim report for ABC India Ltd., MRF Ltd., Canara Bank, Bharat Forge, HCL Technologies, Sesa Goa, Patni Computer Systems (now known as iGate Patni) . From the mean values, it is clear that difference in price was positive. This means that after the results, the prices of securities went up. Significant values are more than 0.05 for LIC Housing Finance Ltd., Cipla, and India Cements, which means there was no significant difference in share prices of these companies before and after the announcement of interim results. This means that interim results had an impact on the share prices for seven companies, and the results' announcement did not impact the share prices of three

|  |  | Share Price | SENSEX |
| :---: | :---: | :---: | :---: |
| Share Price | Pearson Correlation | 1 | 0.727 |
|  | Sig. (2-tailed) | . | 0.000 |
|  | N | 20 | 20 |
| SENSEX | Pearson Correlation | 0.727 | 1 |
|  | Sig. (2-tailed) | 0.000 | . |
|  | N | 20 | 20 |
| Source: BSE website |  |  |  |


| Table 7: Relationship Between LIC Housing Finance Ltd.'s Share Price and The Sensex |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  | Share Price | SENSEX |
| Share Price | Pearson Correlation | 1 | 0.351 |
|  | Sig. (2-tailed) | . | 0.129 |
|  | N | 20 | 20 |
|  | Pearson Correlation | 0.351 | 1 |
|  | Sig. (2-tailed) | 0.129 | . |
|  | N | 20 | 20 |
|  |  |  |  |

Table 8: Relationship Between Share Price Movement and Movement of the Sensex

| Company | Correlation co-efficient | Sig. Value | Sig. Value for T-Test |  |
| :--- | :---: | :---: | :---: | :---: |
| ABC India Ltd. | 35.28 | 0.000 | 0.008 |  |
| LIC Housing Finance Ltd. | 607.94 | 0.129 | 0.734 |  |
| MRF Ltd. | 3373.85 | 0.000 | 0.000 |  |
| Canara Bank | 255.17 | 0.000 | 0.001 |  |
| Bharat Forge Ltd. | 144.775 | 0.000 | 0.000 |  |
| CIPLA Ltd. | 279.93 | 0.520 | 0.146 |  |
| HCL Technologies | 266.635 | 0.000 | 0.000 |  |
| India Cements Ltd. | 141.66 | 0.020 | 0.940 |  |
| Sesa Goa Ltd. | 227.92 | 0.000 | 0.001 |  |
| Patni Computer Systems | 281.73 | 0.050 | 0.000 |  |
| Source: BSE website |  |  |  |  |


| Table 9: Relationship Between Increase In Share Price and Growth In Sensex |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Growth in Share Price | Growth in Result |  |
| Growth in Share Price | Pearson Correlation | 1 | -0.123 |  |
|  | Sig. (2-tailed) | . | 0.735 |  |
|  | N | 10 | 10 |  |
|  | Pearson Correlation | -0.123 | 1 |  |
|  | Sig. (2-tailed) | 0.735 | . |  |
|  | N | 10 | 10 |  |
| Source: BSE website |  |  |  |  |


| Table 10: Mean Share Values Before And After The Interim Reporting |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Period | $\mathbf{N}$ | Mean | Std. Deviation | Std. Error Mean |
| SHARE PRICE | Before | 10 | 798.75 | 26.763 | 8.463 |
|  | After | 10 | 874.18 | 25.553 | 8.080 |
| Source: BSE website |  |  |  |  |  |


| Table 11: Significance Value For Share Prices |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: |
|  | t-test for Equality of Means |  |  |  |
|  |  | t | df | Sig. (2-tailed) |
| SHARE PRICE | Equal variances assumed | -6.446 | 18 | 0.000 |
|  | Equal variances not assumed | -6.446 | 17.962 | 0.000 |
| Source: BSE website |  |  |  |  |

companies. On an overall basis, it can be concluded that interim results did have an impact on the prices of shares of the analyzed companies.

## RELATIONSHIP BETWEEN SHARE PRICES AND THE SENSEX

The rise or fall in the price of a particular share may be due to rise or fall of the market. The market movement is indicated by the movement of the Sensex. The correlation analysis was used to find out the relationship between share price and Sensex movement.
The Table 6 reveals that the correlation relationship between the share price of ABC India Ltd. and the Sensex movement is 0.727 . This shows that there is a strong correlation between Share Price and Sensex. The significant value is 0.000 , which indicates that there is a significant relationship between these two variables. This further means that the Sensex has an impact on the share price. That is, the rise in Sensex results in the rise in the share price, and a fall in the Sensex leads to a fall in the share price. In the earlier analysis, it was stated that after the announcement of the interim results, the share price of $A B C$ India Ltd. had risen. That increase in price was not due to the announcement of results, but due to a rise in the Sensex or due to the market forces.
The Table 7 shows that the correlation coefficient is 0.351 and the significant value is 0.129 . This means that there is no relationship between the share price movement of LIC Housing Finance Ltd. and the Sensex. In the earlier analysis, it was stated that the announcement of results did not have an impact on the share price of LIC Housing Finance Ltd. Now, it is clear that both - the Sensex movement and the announcement of the results - did not have an impact on the share price of LIC Housing Finance Ltd.
The Table 8 indicates that the significant value for the correlation coefficient is less than 0.05 for all securities except LIC Housing Finance Ltd. and CIPLA. This means that share price movement had a close relationship with the movement of the Sensex. Therefore, it can be stated that rise in share prices of all securities was due to a rise in the Sensex. The Table 8 also shows that the significance value for the correlation coefficient is closely related to the significance value for the T-test. This means that the change in share prices was not due to the announcement of the


Table 12: Share Prices Before and After The Interim Report For HDFC Bank

|  | Period | N | Mean | Std. Deviation | Std. Error Mean |
| :--- | :---: | :---: | :---: | :---: | :---: |
| PRICE | Before | 10 | 1440.29 | 57.162 | 18.076 |
|  | After | 10 | 1428.27 | 38.468 | 12.164 |

Source: BSE website

| Table 13: T-Test Statistics For HDFC Bank's Share Prices |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: |
|  | t-test for Equality of Means |  |  |  |
|  |  | $\mathbf{t}$ | df | Sig. (2-tailed) |
| Share Price | Equal variances assumed | 0.552 | 18 | 0.588 |
|  | Equal variances not assumed | 0.552 | 15.764 | 0.589 |
| Source: BSE website |  |  |  |  |

interim results, but due to the market movements.

## RELATIONSHIP BETWEEN INCREASE IN PRICE AND GROWTH IN RESULTS

In the earlier analysis, it was stated that there was a rise in price of many securities after the announcement of the results. Going further, it was necessary to analyze whether there is any relationship between the growth in figures announced in the results and rise in share prices. The increase in net profit of ABC India Ltd. was 115 percent; whereas, the increase in share price of $A B C$ India Ltd. was only 8.5 percent. LIC Housing Finance Ltd. reported a 21 percent decrease in profit, but its share price came down only by 0.49 percent. This indicates that there is no relationship between announcement of results and share price movement.
The Table 9 shows that the correlation between growth in share prices and growth in results is -0.123 . The significance value for the correlation coefficient is 0.735 , which is greater than 0.05 . This indicates that there is no relationship between rise in share prices and growth announced in the results. The negative relationship indicates that the prices of the shares of the analyzed companies declined irrespective of the announcement of good results for the companies. Hence, it is very clear that the investors should not expect that the prices of securities will go up after an announcement of good results by the companies.


| Table 14: Share Price and T-test Statistics |  |  |  |
| :--- | :---: | :---: | :---: |
|  | INDEPENDENT SAMPLE T-TEST |  |  |
| Company | Average share price before the result | Average share price after the result | Sig. value |
| ACC Ltd. | 798.75 | 874.18 | 0.000 |
| State Bank of India | 1687.6 | 1776.76 | 0.001 |
| HDFC Bank Ltd. | 1440.29 | 1428.27 | 0.588 |
| Bharati Airtel | 802.46 | 828.78 | 0.030 |
| Wipro Ltd. | 409.68 | 470.97 | 0.000 |
| Infosys | 1766.25 | 1854.87 | 0.012 |
| L \& T | 1443.12 | 1461.83 | 0.556 |
| ICICI Bank | 730.72 | 755.81 | 0.157 |
| ITC | 217.42 | 240.85 | 0.000 |
| TCS | 397.51 | 482.43 | 0.000 |
| Source: BSE website |  |  |  |

The reaction in price takes place before the announcement of results. This means that the investors are able to predict the results well in advance. Hence, it can be stated that our markets are efficient enough to get the information well in advance.

## IMPACT OF RESULTS ON PRICES OF COMPANIES LISTED ON THE SENSEX

In the earlier part of the analysis, the impact of the results on the share prices of non-Sensex companies was analyzed, and it was concluded that announcement of results did not have a significant impact on share prices. In this section, the impact of results on share prices of companies listed on the Sensex is analyzed.
The Table 10 shows the results of 10 days average share prices before and after the announcement of the quarterly results. The share price of ACC Ltd. before the release of the interim report was ₹ 798.75 and after the announcement, the price of the share was ₹ 874.18 . The mean values indicate that there was an increase in the price of the share to the extent of ₹ 76. The standard deviation values were approximately the same before and after the result. The standard

| Table 15: Relationship Between Share Price and Sensex |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  | Share Price | SENSEX |
| Share Price | Pearson Correlation | 1 | 0.954 |
|  | Sig. (2-tailed) | . | 0.000 |
|  | N | 20 | 20 |
|  | Pearson Correlation | 0.954 | 1 |
|  | Sig. (2-tailed) | 0.000 |  |
|  | N | 20 | 20 |
| Source: BSE website |  |  |  |


| Table 16: Correlation Analysis |  |  |  |
| :--- | :---: | :---: | :---: |
| Company | Correlation Co-efficient | Sig. Value | T-test Sig. value |
| ACC Ltd. | 0.954 | 0.000 | 0.000 |
| State Bank of India | 0.880 | 0.000 | 0.001 |
| HDFC Bank Ltd. | 0.690 | 0.001 | 0.588 |
| Bharati Airtel | 0.671 | 0.001 | 0.030 |
| Wipro Ltd. | 0.967 | 0.000 | 0.000 |
| Infosys | 0.801 | 0.000 | 0.012 |
| L \& T | 0.681 | 0.001 | 0.556 |
| ICICI Bank | 0.885 | 0.000 | 0.157 |
| ITC | 0.912 | 0.000 | 0.000 |
| TCS | 0.865 | 0.000 | 0.000 |
| Source: BSE website |  |  |  |

Table 17: Increase In Share Price and Increase In Profit

| Company | Increased Share price | Increased profit |
| :--- | :---: | :---: |
| ACC Ltd. | 9.5 | 19.9 |
| State Bank of India | 5.2 | -15 |
| HDFC Bank Ltd. | 0.83 | 19.9 |
| Bharati Airtel | 3.27 | 22.9 |
| Wipro Ltd. | 14.9 | 42 |
| Infosys | 5.01 | 42 |
| L \& T | 14.9 | 42 |
| ICICI Bank | 3.4 | 18.1 |
| ITC | 10.7 | 8.3 |
| TCS | 21 | 42 |
| Source: BSE website |  |  |

deviation indicates that there was a deviation of ₹ 26 from the mean value (798) on either side.
The Table 11 reveals whether the rise in price of ₹ 76 is significant or not, and independent sample t-test was used to arrive at the conclusion. The significance value for the $t$-test is 0.000 , which is greater than 0.05 . This means that there was a significant rise in the prices of the shares after the announcement of the results. The Figure 2 shows the fluctuation in price of the share of ACC Ltd. during the study period ( 10 days before and 10 days after the announcement of the interim results). The arrow indicates the day on which the interim results were announced (i.e. July 23, 2009). The graph indicates that after the interim results were out, there was a continuous increase in the share price.

| Table 18: Relationship Between Growth In Share Price and Growth In Result |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  |  | Growth in Share Price | Growth in Result |  |
| Growth in Share Price | Pearson Correlation | 1 | -0.375 |  |
|  | Sig. (2-tailed) | . | 0.285 |  |
|  | N | 10 | 10 |  |
| Growth in Result | Pearson Correlation | -0.375 | 1 |  |
|  | Sig. (2-tailed) | 0.285 | . |  |
|  | N | 10 | 10 |  |
|  |  |  |  |  |

The Table 12 indicates that ten days' average share price of HDFC Bank before and after the announcement of the results was $₹ 1440.29$ and $₹ 1428.27$ respectively. So, there was a fall (in the share price) of ₹ 12 after the announcement of the results. The standard deviation before and after results' announcement was ₹ 57 and ₹ 38 . The standard deviation before the announcement of the results was very high, which means that there was a heavy fluctuation in price. This may be due to varied expectation in results. The Table 13 depicts that the $t$-test was carried out to test whether decrease in share price was really significant or not. The significance value for the test is 0.588 , which is greater than 0.05 . This indicates that the change in share price was not significant.
The Figure 3 shows the share price movements of the share of HDFC Bank Ltd. The arrow indicates the day on which the interim results were reported i.e. July 14, 2009. The variation in the graph before and after the interim results were out is very high, which is the reason for a very high standard deviation. Though there was a rise in the price after the results, it did not reach the previous high price reported before the results. The Table 14 shows the Independent sample $t$-test result statistics. The $t$-test indicates the level of difference in share prices before and after the results. The significance values were less than 0.05 for the companies such as ACC Ltd., State Bank of India, Bharti Airtel, Wipro Ltd., Infosys Technologies Limited, ITC, and Tata Consultancy Services. This means that there was a significant difference in share prices of these companies before and after the interim report. This means that the interim results had an impact on the share prices. The significance value is greater than 0.05 for ICICI Bank, HDFC Bank Ltd. and L\&T. This signifies that the interim report had no impact on the share prices of ICICI Bank, HDFC Bank and L\&T.
The Table 15 indicates that in the earlier analysis, it was stated that the share prices had increased significantly after the announcement of the results. However, the increase in share prices may not be due to the results, but it may be due to a general rise in the market conditions. The changes in the overall market factors are reflected in the movement of the Sensex. To find out the impact of the market on the share prices, the correlation analysis was performed. The correlation coefficient value for ACC Ltd. was 0.954 . The high correlation coefficient indicates that there is perfect correlation between share prices and the Sensex. This means that the share prices and the Sensex are correlated. The significance value is less than 0.05 , which indicates that there exists a significant relation between share prices and the Sensex. It can be further inferred that rise in share prices was due to rise in the Sensex. Hence, it can be concluded that rise in the share price of ACC Ltd. was not due to the interim results; but it was due to the favourable market conditions.
The Table 16 depicts the correlation analysis, which shows that the significance values between share prices and the Sensex are less than 0.05 for all the companies. This means that there is a significant relationship between the movement of the Sensex and the share price movement. It can further be inferred that share price movement of all the companies, including the Sensex, was mainly influenced by market conditions rather than the announcement of the quarterly results.

## RELATIONSHIP BETWEEN GROWTH IN SHARE PRICES AND GROWTH IN RESULTS FOR THE SENSEX STOCKS

In the earlier analysis, it was stated that there was a rise in prices of many securities after the announcement of the results. Going further, it was necessary to analyze whether percentage change in profit announced in the results is reflected in the share prices.

The Table 17 shows the movement of the share prices. ACC Ltd. reported a 19.9 percent increase in profit, but the share price of ACC Ltd. increased by only 9.5 percent. SBI's net profit decreased by 15 percent, but the share price of SBI increased by 5.2 percent. Likewise, the Table 17 shows a percentage increase in net profit and percentage increase in share prices of companies listed on the Sensex.
The Table 18 indicates that the correlation coefficient for the relationship between growth in share prices and growth in results was negative. The significance value for the relationship is 0.285 , which is greater than 0.05 . This means that there is no significant relationship between increase in share prices and growth in profit. This may be due to the speculators who operate in the stock market before the announcement of the interim results, expecting a good or a bad result. So, the rise or fall in the share prices will not take place after the announcement of the results.

## CONCLUSION

The share prices of all securities went up after the results, with the exception of LIC Housing Finance Ltd. and Cipla. The independent sample T-test shows that there was a significant rise in prices after the announcement of the results. The correlation analysis shows that there is a significant relationship between price movement and the movement of the Sensex. Therefore, it can be stated that the rise share in prices of all securities was due to the rise in the Sensex. The significant value for correlation coefficient is closely related to the significance value for the T-test. This means that the change in the prices of the shares was not due to the quarterly results, but due to market movement. The correlation coefficient for the relationship between increase in share prices and growth in results is -0.123 . The significance value for the correlation coefficient is 0.735 . This indicates that there is no relationship between increase in share prices and growth announced in the quarterly results. The negative relationship indicates that share prices of certain companies decreased irrespective of good results. Hence, it is very clear that the investor should not expect that the price of securities will go up after the announcement of good results by the companies. The fluctuation in prices occurs due to speculation on the part of the investors, before any announcement regarding the results is made by the companies. Hence, it can be stated that our market is efficient enough to get information before it could be put into the public domain. Though the results did not having any immediate impact on the share prices, the interim report definitely helps the investors to track the company's performance.

## LIMITATIONS OF THE STUDY

* Data availability was a limitation of the study, as information for all BSE Sensex companies could not be collected.
* Time and cost also imposed a serious limitation on the study as the study was time bound.


## SCOPE FOR FUTURE RESEARCH

The primary objective of the present study was to analyze the effect of interim results on market prices of selected securities listed on the BSE index. There are many corporate events like dividend announcements, bonus issue, rights issue, stock splits, buy back of shares, mergers, takeover announcements, new share issue and earnings announcement, etc. Among these corporate events, the present study analyzed the effect of quarterly announcements on share prices only. There is a lot of scope for analyzing other corporate announcements for future studies.

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