
A study on Impact of Earnings Announcement on Stock Returns

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Abstract: *The paper attempts to study the impact of earnings announcements on stock returns in the Indian context. This paper empirically examines whether earning reports possesses information value that leads to changes in the stock returns of the stock traded in National stock exchange. The main objective of the study is to investigate the impact of quarterly earnings announcements on the stocks' prices. Evidence of significant abnormal returns can be found in selected sample under study and it can be inferred that these announcements carry information value for investors. The results test the semi-strong form of market efficiency in the context of Indian stock markets.*

Keywords: *Earnings, Abnormal Returns, Quarterly, Stock Returns.*

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Objectives of the study:

- 1) To study relation between the effect of earnings announcement and stock prices.
- 2) To analyze Pre and Post effect of announcements of Earnings on selected companies.
- 3) To measure the degree of impact due to announcements.

Introduction of the study:

The information content of earnings announcement is of prime importance to the investors. Company earnings announcements are closely-watched events, as it's the main source of new information which reveals the company's performance. It has been proven that prices respond quickly to the information in earnings announcements with investors reacting positively to good news and negatively to bad news. However, when companies achieves the expectations, the price response is typically near to zero. Stock market has been found to react to various corporate announcements. One such significant announcement, which has a bearing on the stock price movements of the firm, is earning information disclosure. The scenario is reflected in the abnormal stock return of the firm surrounding the announcement. The degree of abnormal return provides a direct measure of unexpected change in the investors wealth associated with

the event. However, the degree of the effect and the time taken to incorporate the information content depend on characteristics of the firm under study. Thus, the effect of the earning announcements is an important empirical matter in the capital market, effecting the movement of the share prices.

Significance of the Study:

There's need to study the topic as due to changing trend there's significant effect on share price which leads to impact on wealth creation of shareholders. The fact is proved that if the capital markets are efficient then they would spontaneously react to various kinds of Earnings announcements. On the other hand, if the markets are inefficient then such information already gets reacted to the markets much before it is formally announced. Since decisions regarding any Earning announcements are taken in the meetings of the Board of Directors, it is quite possible that there could be a leakage of information by employees who come to know of such information.

Review of Literature:

- 1) Foerster,2009;Yang et al,2011-The study highlights events related to information content of accounting profits, also focuses on investors tendency on variations in earnings.
- 2) Zhen,Xie and Xu 2005-The study highlights signal theory based on earnings management which is related to financial communication. The study focuses on the idea that earnings management is an attempt to fool stakeholders.
- 3) Mallikarjunappa and Nayak (2007) revealed that the Indian stock market do not react immediately to quarterly earnings announcements and provided an opportunity to earn abnormal returns.
- 4) Chaturvedi(2000) analyzed the reaction and impact on the stock price to semi-annual earnings announcement and revealed abnormal returns both during the pre and post announcement dates.
- 5) Gupta (2006) analyzed that information content earnings announcement made in a particular year constituting of CNX Nifty index companies and found significant abnormal returns around the announcement date.
- 6) Das et al,(2007) revealed the quarterly earnings announcements has proven that large companies do not have substantial impact on stock return. In the study he has made effort to overcome the information content of quarterly earnings.

Research Methodology:

Secondary and descriptive study undertaken for the study. During the study period totally 10 companies in the NSE Sensex index are under taken for study. In this study event study methodology is followed. Secondary data on quarterly earnings announcements of different companies during the period were collected from the website of National Stock Exchange (NSE). Data regarding share prices has been taken from NSE. The announcements made by these large firms correspond to the earnings from the first quarter of the financial year. If quarterly earnings announcements have informational significance for investor, then such announcement should induce abnormal stock return during the period surrounding the announcement. The study also investigates whether stocks influence price shift over a period of time corresponding to 'good' and 'bad' announcements. The dates on which earnings announcements are released are defined as the event dates ($t=0$) provided that the stocks have been traded on that date. On the announcement date it is termed as the event of announcement of earnings during non-trading days, the trading day immediately following the announcement date has been assigned as event date. This has been done in order to investigate the impact and effect of announcement immediately after the announcement. The effects of earnings announcements on equity share prices have been examined by taking daily-adjusted market price data. Pre announcement is considered as $t=-1$ and post as $t=1$ for the study.

Hypothesis:

The null hypothesis 'Ho', that the event has no impact on the returns, is to be tested. Now, if Earnings announcements have some informational content for the investors, then AR for the days of the announcement will be greater than AR during non-event days for good announcement and viceversa for bad announcement.

RESULTS AND FINDINGS

Abnormal Returns

Table.1

Infosys Limited, a global leader in consulting, technology, outsourcing and next-generation services, announced the results for its first quarter Earnings ended June 30, 2016 on, July 15, 2016 in Q1 .It shows extensively negative abnormal returns on the day of announcement, compared to pre and post announcement. Similarly it announced its second quarter Earnings ended on 30/9/2016 on 15th October. It shows same results as per Q1i.e. Extensively negative abnormal returns on the day of announcement, compared to pre and post announcement

Table.2

ITC announced its first quarter Earnings ended June 30, 2016 on July 20, 2016, which gives a

positive abnormal returns on the day of announcement compared to pre and post announcement in Q1 .It announced its second quarter Earnings ended September 30, 2016 on 30th September, 2016, which gives a negative abnormal returns on the day of announcement compared to pre and post announcement.

Table.3

ICICI Bank announced its first quarter Earnings ended June 30, 2016 on July 29, 2016, which gives a positive abnormal returns in Q1 compared to post announcement. It announced its second quarter Earnings ended September 30, 2016 on 8th November, 2016, which gives a positive abnormal returns post announcement but decreases compared to pre and post announcement.

Table.4

Idea Cellular announced its first quarter earnings ended June 30, 2016 on August 8, 2016, which gives a negative abnormal returns on the day of announcement compared to pre announcement in Q1 .It announced its second quarter earnings ended September 30, 2016 on 26th Oct, 2016, which gives a positive abnormal returns on the day of announcement compared to pre announcement and post announcement in Q2.

Table.5

Wipro announced its first quarter Earnings ended June 30, 2016 on July 19, 2016, which gives extensively negative abnormal return on the date of announcement as well as post announcement compared to pre- announcement in Q1 .It announced its second quarter Earnings ended September 30, 2016 on 21st Oct, 2016, which gives negative abnormal return on the date of announcement ,but negative abnormal returns shows a decrease compared to pre-announcement and post announcement in Q2.

Table.6

TCS announced its first quarter Earnings ended June 30, 2016 on July 14, 2016, which gives extensive negative abnormal returns on the day of announcement prior to the day of announcement in Q1 , it further increases negative abnormal returns post announcements in Q1. It announced its second quarter Earnings ended September 30, 2016 on October 14, 2016, which gives negative abnormal returns on the day of announcement but shows a decreases in negative abnormal returns compared to pre as well as post to the day of announcement in Q2.

Table.7

HCL announced its first quarter earnings ended June 30, 2016 on August, 3, 2016, which shows positive abnormal returns on the day of announcement, compared to pre and post announcement in Q1 .It announced its second quarter earnings ended September 30, 2016 on 12th October 2016,

which shows negative abnormal returns on the day of announcement, compared to pre and post negative abnormal returns further increased.

Table.8

Cipla announced its first quarter earnings ended June 30, 2016 on July 20, 2016, which shows extensively low negative returns on the day of compared to pre and post announcement in Q1. It announced its second quarter earnings ended September 30, 2016 on 9th November, 2016, which shows low negative returns on the day of announcement compared to pre and post announcement in Q2.

Table.9

ONGC announced its first quarter earnings ended June 30, 2016 on September 7, 2016, which shows positive abnormal returns on the day of announcement compared to pre and post announcement in Q1 .It announced its second quarter earnings ended September 30, 2016 on 21st October 2016, which shows negative abnormal returns on the day of announcement compared to pre and post announcement in Q2.

Table.10

HUL announced its first quarter Earnings ended June 30, 2016 on July 8, 2016, which gives a extensive negative abnormal returns on the day of announcement compared to pre announcement in Q1 .It has a further increase in negative abnormal returns during post announcements. It announced its second quarter Earnings ended September 30, 2016 on 26th October 2016, which gives a extensive negative abnormal returns on the day of announcement compared to pre announcement in Q2 .It has a further increase in negative abnormal returns during post announcements.

Table.11

ACC announced its first quarter Earnings ended June 30, 2016 on July 28, 2016, which gives a extensive negative abnormal returns on the day of announcement compared to pre announcement in Q1 .It has a further increase in negative abnormal returns during post announcements. It announced its second quarter Earnings ended September 30, 2016 on 21th October 2016, which gives an extensive negative abnormal returns on the day of announcement compared to pre announcement in Q2 .It shows a decrease in negative abnormal returns during post announcements.

Table 12

ARP announced its first quarter Earnings ended June 30, 2016 on 23rd August 2016, which gives a extensive low positive abnormal returns on the day of announcement compared to pre and post announcement in Q1 . It announced its second quarter Earnings ended September 30, 2016 on 15th

November 2016, which gives an extensive low positive abnormal returns on the day of announcement compared to pre announcement in Q2 .It shows a negative abnormal returns during post announcements

Table 13

Bharti Airtel announced its first quarter Earnings ended June 30, 2016 on 27th July 2016, which gives a extensive low negative abnormal returns on the day of announcement compared to pre and post announcement in Q1 . It announced its second quarter Earnings ended September 30, 2016 on 25th October 2016, which gives an extensive low negative abnormal returns on the day of announcement compared to pre announcement in Q2 .It shows a positive abnormal returns during post announcements

Table 14

Bhel announced its first quarter Earnings ended June 30, 2016 on 27th July 2016, which gives a positive abnormal returns on the day of announcement compared to pre and post announcement in Q1 . It announced its second quarter Earnings ended September 30, 2016 on 8th November, 2016, which gives a high positive abnormal returns on the day of announcement compared to pre and post announcement in Q2 .

Table 15

BPCL announced its first quarter Earnings ended June 30, 2016 on 31st August 2016, which gives a negative abnormal returns on the day of announcement compared to pre and post announcement in Q1 . It announced its second quarter Earnings ended September 30, 2016 on 8th November, 2016, which gives a negative abnormal returns on the day of announcement compared to pre and post announcements in Q2.

Table 16

Hindalco announced its first quarter Earnings ended June 30, 2016 on 12th August 2016, which gives a positive abnormal returns on the day of announcement compared to pre and it shows further increases in positive abnormal post announcement in Q1. It announced its second quarter Earnings ended September 30, 2016 on 15th November, 2016, which gives a low positive abnormal returns on the day of announcement compared to pre ,it further shows a low positive abnormal returns post announcements in Q2.

Table 17

LUPIN announced its first quarter Earnings ended June 30, 2016 on 9th August 2016, which shows a low negative abnormal returns on the day of announcement compared to pre and post announcement in Q1. It announced its second quarter Earnings ended September 30, 2016 on 15th November, 2016, which gives a high negative abnormal returns on the day of announcement

compared to pre, it further shows a high abnormal returns post announcements in Q2.

Table 18

Tata steel announced its first quarter Earnings ended June 30, 2016 on 12th September 2016, which shows a low positive abnormal returns on the day of announcement compared to pre and post announcement in Q1. It announced its second quarter Earnings ended September 30, 2016 on 11th November, 2016, which gives a low positive abnormal returns on the day of announcement compared to pre, it further shows a low positive abnormal returns post announcements in Q2.

Table 19

Tech Mahindra announced its first quarter Earnings ended June 30, 2016 on 1st August 2016, which shows a high negative abnormal returns on the day of announcement compared to pre and it shows a positive abnormal returns post announcement in Q1. It announced its second quarter Earnings ended September 30, 2016 on 27th October 2016, which gives a high negative abnormal returns on the day of announcement compared to pre, it further shows a positive abnormal returns post announcements in Q2.

Table 20

Ultra tech announced its first quarter Earnings ended June 30, 2016 on 19th July 2016, which shows a high positive abnormal returns on the day of announcement compared to pre and it shows a further high positive abnormal returns post announcement in Q1. It announced its second quarter Earnings ended September 30, 2016 on 17th October 2016, which gives a low positive abnormal returns on the day of announcement compared to pre, it further shows a negative abnormal returns post announcements in Q2.

Figure.1

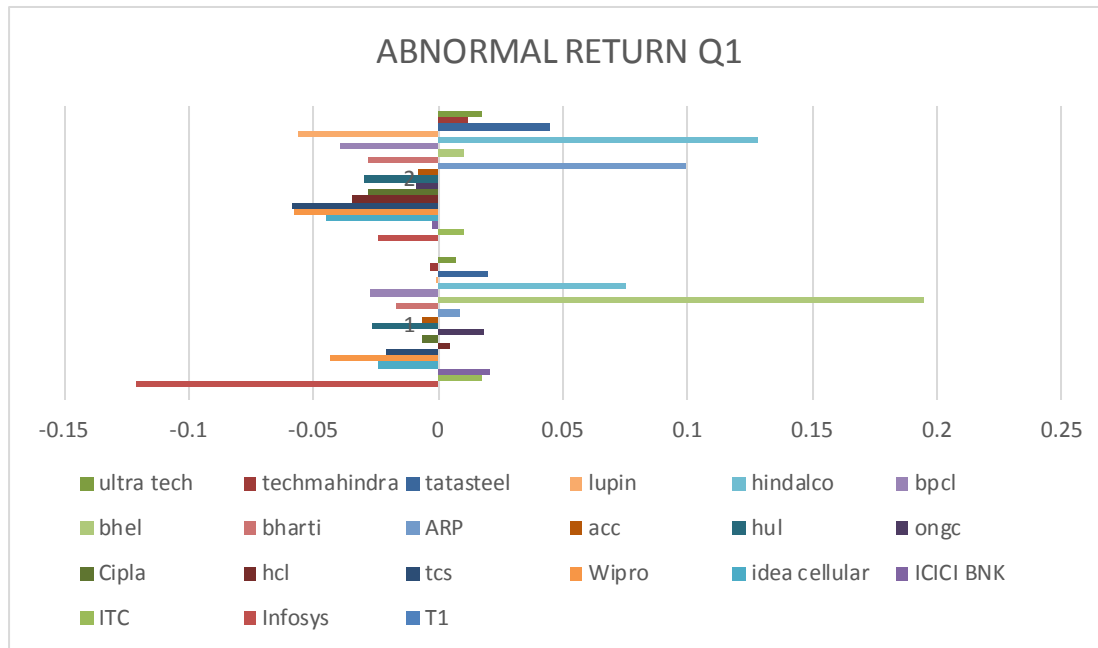


Figure.2

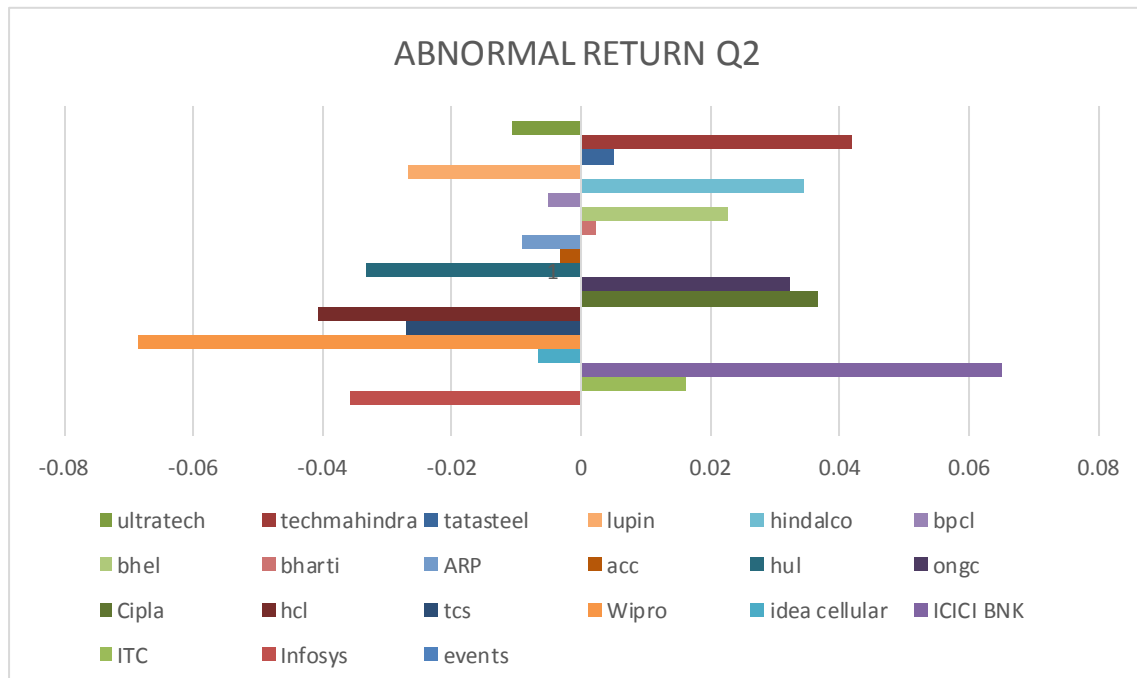


Figure. 1 and Figure 2 Highlights the Abnormal returns corresponding 20 companies For Q1 and Q2 with respect to Pre announcement, the event announcement and post announcement. The event of announcement (t0) which can be seen from the above graph that it shows

fluctuations in return in almost all the companies on the day of the announcement. Abnormal

T. 11	T. 12	T. 13	T. 14	T. 15	T.16	T. 17	T. 18	T.19	T.20				
ACC	ARP	Bharti	Bhel	BPCL	Hindalco	Lupin	Tatasteel	Tech mahindra	Ultra tech	AVG	t cal value	t table value @99%	t table value @95%
-0.10%	1.96%	-2.45%	2.66%	-1.10%	3.66%	-0.67%	4.05%	-0.01%	0.21%	-0.20%	-10.45%	2.539	1.729
-0.67%	0.87%	-1.69%	19.46%	-2.74%	7.51%	-0.03%	2.00%	-0.32%	0.73%	0.35%	17.72%	2.539	1.729
-0.84%	9.92%	-2.79%	1.106%	-2.96%	1.384%	-4.560%	1.447%	1.20%	1.72%	-0.50%	-25.29%	2.539	1.729
	Events	Infosys	ITC	ICICI BNK	Idea cellular	Wipro	TCS	HCL	Cipla	ONGC	HUL		
T1		-5.19%	0.67%	4.34%	-0.23%	-4.03%	-1.80%	-0.46%	-3.18%	-2.45%	0.13%		
t0		-12.16%	1.76%	2.06%	-2.43%	-4.32%	-2.09%	0.50%	-0.68%	1.80%	-2.66%		
t1		-2.42%	1.00%	-0.21%	-4.49%	-5.82%	-5.83%	-3.46%	-2.83%	-0.88%	-3.01%		

return is fluctuating randomly prior to and post-announcement event period; thus, inference can be made that the abnormal returns are showing an inconsistent trend due to earning announcement.

HYPOTHESIS TESTING: T value tested at 95 % and 99% significance level.

Q.1. S.D. of Abnormal returns	TABLE 1	TABLE 2	TABLE 3	TABLE 4	TABLE 5	TABLE 6	TABLE 7	TABLE 8	TABLE 9	TABLE 10
T1	1.27%	4.16%	1.61%	2.35%	1.23%	1.19%	1.49%	1.32%	1.39%	1.11%
t0	1.62%	4.14%	1.63%	2.36%	1.22%	1.19%	1.54%	1.33%	1.41%	1.10%
t1	1.62%	4.11%	1.71%	2.41%	1.24%	1.22%	1.53%	1.32%	1.40%	1.09%

TABLE 11	TABLE 12	TABLE 13	TABLE 14	TABLE 15	TABLE 16	TABLE 17	TABLE 18	TABLE 19	TABLE 20	AVG
1.01%	2.35%	1.62%	1.86%	5.37%	2.27%	1.70%	1.93%	1.50%	1.33%	1.90%
1.01%	2.35%	1.61%	2.41%	5.35%	2.26%	1.70%	1.94%	1.49%	1.32%	1.95%
1.00%	2.46%	1.60%	2.41%	5.33%	2.33%	1.75%	1.93%	1.50%	1.32%	1.96%

Q2 Abnormal return	TABLE 1	TABLE 2	TABLE 3	TABLE 4	TABLE 5	TABLE 6	TABLE 7	TABLE 8	TABLE 9	TABLE 10
Events	Infosys	ITC	ICICI BNK	Idea cellular	Wipro	TCS	HCL	Cipla	ONGC	HUL
T1	-0.57%	0.44%	6.84%	-0.87%	-3.85%	-4.25%	-1.41%	-5.04%	-0.49%	-4.79%
t0	-5.92%	-1.32%	5.51%	6.36%	-2.94%	-1.41%	-2.74%	-3.75%	-1.60%	-1.28%
t1	-3.59%	1.63%	6.50%	-0.67%	-6.87%	-2.70%	-4.07%	3.66%	3.22%	-3.32%

T. 11	T. 12	T. 13	T. 14	T. 15	T. 16	T. 17	T.18	T. 19	T. 20				
ACC	ARP	Bharti	Bhel	BPCL	Hindalco	Lupin	Tatasteel	Tech mahindra	Ultratech	AVG	t cal value	t table value @99%	t table value @95%
-0.66%	1.21%	-3.35%	5.55%	0.55%	9.88%	-1.68%	12.07%	-2.55%	1.86%	0.44%	23.78%	2.539	1.729
-2.75%	0.41%	-0.41%	5.62%	-1.80%	8.35%	-2.02%	6.66%	-2.90%	0.95%	0.15%	8.04%	2.539	1.729
-0.33%	-0.91%	0.24%	2.26%	-0.51%	3.46%	-2.69%	0.50%	4.19%	-1.08%	-0.05%	-2.92%	2.539	1.729

Q.2. S.D. of Abnormal returns	TABLE 1	TABLE 2	TABLE 3	TABLE 4	TABLE 5	TABLE 6	TABLE 7	TABLE 8	TABLE 9	TABLE 10
T1	1.40%	3.39%	1.66%	2.43%	1.17%	1.29%	1.48%	1.40%	1.51%	1.07%
t0	1.41%	3.38%	1.66%	2.47%	1.17%	1.30%	1.48%	1.40%	1.50%	1.08%
t1	1.40%	3.37%	1.66%	2.46%	1.19%	1.29%	1.47%	1.49%	1.54%	1.07%

TABLE 11	TABLE 12	TABLE 13	TABLE 14	TABLE 15	TABLE 16	TABLE 17	TABLE 18	TABLE 19	TABLE 20	
1.14%	2.46%	1.55%	2.19%	4.55%	2.27%	1.75%	1.94%	1.43%	1.31%	1.87%
1.16%	2.46%	1.55%	2.19%	4.53%	2.26%	1.75%	1.94%	1.43%	1.30%	1.87%
1.16%	2.46%	1.56%	2.19%	4.52%	2.27%	1.75%	1.97%	1.49%	1.31%	1.88%

The above table show values of abnormal returns and Standard deviation for selected 20 companies for 2 Quarters. T calculated values for Q1 shows a significance at 95% level as well as 99% level for all the events. Accordingly, we reject H0 and confirm that the earnings announcement significantly and positively affects Stock return. For Q1. T calculated values for Q2 shows a significance at 95% level as well as 99% level for pre and for the day of announcement events. Accordingly, we reject H0 and confirm that the earnings announcement significantly and positively affects Stock return. Hence, earnings announcement carries information content that

might significantly influence market reaction.

CONCLUSION

The abnormal returns of the Sensex companies was studied to test whether the National Stock Exchange reflects semi strong efficiency, as studied with reference to the Earnings announcements. The stock price movements are linked to various factors related to the economy, industry, company etc.

This implies that the Earnings Announcements have pre-return or post-return effects on the firms Stock price .It may also be analyzed and concluded that these announcements reveals information value for investors. The Earnings Announcements carry information for the security valuation and market uses the information in general. The Indian capital market is able to capture the information contained in the Earnings announcements. The pre-announcement reaction shows that market is able to capture the earnings information before its announcements. The results analyses that the Indian Capital Market is semi-strong efficient as it is using the information relevant for security valuation and for investment decision making.

LIMITATIONS OF THE STUDY

The results of the study could have been further enhanced, if the study would had covered even larger sample and longer time period. The study has conducted the analysis on the daily stock returns. The closing share prices have been taken from available database. The results may differ if it would be collected from any other database.

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