Stock Market Volatility Dynamics & Results Announcements: A Causal Link (A Study Of India)

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ABSTRACT *In India, the stock market has rapid changing behavior due to the influence of the different factors. Among all of them, the corporate announcements especially regarding the earnings, disclosed in their reports have the most noticeable news for the investors. In the present study, the researchers have considered 12 quarters for the study period of 3 financial years from 2008-09 to 2010-11. The researchers have an idea to judge the overall market behavior during the quarterly period. For this, researchers have taken the BSE sectoral indices and BSE Sensex benchmark to judge the movements of the overall market as per the different sectors and established a causal relationship between both variables; Sensex & Sectoral indexes. The finding has shown that all most all sectoral indexes have significant relationship with Sensex during the quarterly results disclosing period.*

INTRODUCTION:

In India, the stock market has rapid changing behavior due to the influence of the different factors. The market has the ability to react towards the different issues whether it is economic, political, macro and micro. Among all of them, the corporate announcements especially regarding the earnings, disclosed in their reports have the most noticeable news for the investors. The positive or negative performances of companies as per the investors' expectations possess the up or down trend in the market prices during that period. The accurate, transparent and timely reporting of companies' financial performances is the main tool to judge the actual position of corporate sector to their investors and share holders. In this way, to protect the investors' interests and to regulate companies' workings; ICAI has issued the AS-25 for Interim Financial Reporting and SEBI has made it mandatory to follow AS-25 by all the listed companies. According to the guidelines of the SEBI in clause 41 of Listing Agreements, all listed companies has started to furnishing their financial performance reports as per AS-25 and disclosed them on quarterly basis. The real utility of interim reporting is reflecting from the fact that it provides most recent data to the investors and investment analysts in the process of continuous reporting to update and adjust their projections about future health of companies.

In this study, the researchers have an idea to judge the overall market behavior during the quarterly period. The criteria of taking those two parameters; Sectoral index and Sensex was that the working of any company can reflected its impact on the sector overall, so that the constituents of any sector can easily affect the sectoral indices of that sector. The other parameter Sensex, has been taken as the stock market indicator overall as it is a barometer of market performance. So, it is quite appropriate that the Sensex should be compared with BSE Sectoral indices to judge the impact of overall performance of different companies belongs to the different sector during the reporting period.

The rest paper is divided in different sections; Literature Review, Research methodology, Empirical Research and Conclusion.

LITERATURE REVIEW:

The review of the different past studies can provide idea for understanding the situations and finding on the different grounds by which the researcher elaborates the finding with logical reasoning. Santu Das, J.K. Pattnayak, Pramod Pathak (2008) investigated the impact of quarterly earnings announcements on stock prices movement of the firms constituting the BSE-Sensex. Daily return data has been used to study the mean stock price effect. Nikhil Chandra Shil (2008) discussed different IFR theories with a detailed historical background of this. And content analysis on some selected IF reports was done for giving the paper a practical insight. Asheq Razour Rahman, Teck Mang Tay, Shiyun Cai (2007), studied three issues pertaining to quarterly reporting; its benefits, drawbacks and determinants. Adam Szyszka (2001), dealt with market reaction to the announcement of quarterly earnings. They observed that information content of quarterly reports is accordingly reflected in stock prices, as theoretically implied by the efficient market hypothesis.

RESEARCH METHODOLOGY:

The following methodology has been used for the study:

Research Question: Is there any significant relationship exists between the stock market benchmark index and different sectoral indices during the IFR/Quarterly results announcement period and any cause and effect association existed.

Data Base: For the fulfillment of the objectives the data has been collected from the different sources. The study has been based on secondary data. The study has been considered the Bombay stock exchanges (BSE) and considered 11 sectoral indexes' returns during the quarterly results period.

Tools:

Correlation Analysis: The correlation analysis is the statistical tool describes the degree to which one variable is linearly related to another. It is a degree of relationship which also explains the direction of relationship.

Causality Analysis: For exploring the causal link between the stock market Benchmark and the Sectoral index during the quarterly reporting period, the researchers have used the Granger Causality test proposed by C. J. Granger (1969). Granger Causality test is a hypotheses test for determining whether one time series is useful in forecasting another or not.

EMPIRICAL ANALYSIS:

To analyze to pre determined objective of the study, researchers have considered about 11 major sectoral indexes as to find out the market behavior during the quarterly announcement period, for the study period of three financial years;

FY 2008-09 to 2010-11. Researchers further established the analytical framework on the daily returns of both variables; Sensex and Sectoral indexes. Table 1 has the results of the analysis containing correlation analysis:

1: Result specification (relationship)

Sectoral Indices	Coefficient of Correlation (r)	Coefficient of Determination (r^2)	P value
BSE Auto - Sensex	0.893**	.798	.000
BSE Bankex - Sensex	0.919**	.845	.000
BSE CG - Sensex	0.945**	.893	.000
BSE FMCG - Sensex	- 0.364	.132	.244
BSE HC - Sensex	0.750**	.563	.005
BSE IT - Sensex	0.831**	0.661	.001
BSE Metal - Sensex	0.921**	0.848	.000
BSE Oil Gas - Sensex	0.857**	0.734	.000
BSE Power - Sensex	0.934**	0.872	.000
BSE Realty - Sensex	0.943**	0.889	.000
BSE Teck - Sensex	0.922**	0.850	.000

**Significant at 0.05 (5%) level two tailed.

The above stated table indicates the results of the analysis for all the sectoral indices. Most of the sectors have the positive degree of relationship as up to some extent the variable x has been affected to the variable y. And that relationship was also significant at level of significance 0.05. So, in testing of hypothesis researchers have rejected the null hypothesis that sectoral indices have not significant impact on market benchmark during the reporting period. Only the one index BSE FMCG shows the negative not significant relationship at any level. For the analysis, the researchers have taken the closing index points of both the variables on quarterly basis as to check the movements during the quarterly reporting. The researchers have discussed the picture of Causality analysis of Sectoral indexes and BSE Sensex in this section separately. Table 2 shows the results of Granger causality Tests (see annexure).

Table 2 (Here)
In this analysis, overall market trend has been noticed during the results announcements by comparing Sensex with Sectoral indexes. The finding in Table 2 has shown that all most all sectoral indexes have significant relationship with Sensex and different indexes have different type of causal relationship; unidirectional, feedback and independence. As up to some extent causal relationship existed between those variables.

CONCLUSION:
This paper presents the comprehensive view of stock market reaction to the reporting practices of constituents of different sectors as whole on market benchmark and sectoral indexes. In the last phase of analysis, overall market trend has been noticed during the results announcements by comparing Sensex with Sectoral indexes. The finding has shown that all most all sectoral indexes have significant relationship with Sensex and Granger Causality Test has also been applied to check the causal relationship of all the sectoral indexes with Sensex. By this, researcher has found that different indexes have different type of causal relationship; unidirectional, feedback and independence.

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