Semi Month Effect in Indian Health Care Sector with Reference BSE Health Care Index

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Abstract— This study investigates the existence of a Semi month effect in India’s Health Care sector. The study uses the daily return data of the Bombay Stock Exchanges (BSE) Health Care (HC) Index for the period ranging between April 2006 and March 2015. After examining the random of the return series, we insist on Descriptive statistics & paired ‘t’ test to find the semi month effect in stock returns in India. The outcomes confirm the presence of seasonality in stock returns in India and the semi month effect. The findings are also reliable with the semi-month effect does exist in the BSE Health Care index. The results of the study imply that the stock market in India, Health Care sector is inefficient, and hence, investors can time their share investments to expand returns.

Key words: Anomalies, Semi Month Effect, BSE Health Care Index, and Efficient Market Hypothesis

I. INTRODUCTION

Stock market efficiency is amongst the most researched areas in finance. Stock markets are considered efficient informational. The weak form of market efficiency states that it is not possible to predict stock price and return movements using past price data. Following Fama (1965; 1970), a huge number of studies were conducted to test the efficient market hypothesis (EMH). These studies mostly have shown that stock prices behave randomly. More recently, however, researchers have collected evidence opposing to the EMH. They have identified systematic variations in the stock returns. The important anomalies include the Semi Monthly effect and the seasonal effect. The existence of the seasonal effect denies the weak form of the EMH and implies market inefficiency. In an inefficient market investor would be able to earn abnormal profits, that is, returns that are not appropriate with risk. Semi month effect the mean return of the First Half of the Month has been compared to the return of the second half of the month. The purpose of studying Semi-month Effect is to find suitable investment time during fortnight month. Among the pioneers of empirical evidence for semi-monthly is the research study carried by Ariel (1987). In particular, Ariel (1987) claimed that in the US equity markets, it seems that positive average returns were earned only around the commencement and during the first half of calendar months, and zero average returns during the second part. In this respect, Penman's (1987) claimed that this anomaly could be justified based on the tendency by firms to state good news during the first half of the month and bad news during the second half. Similarly, Jaffe and Westerfield (1989) reported the intra-month effects on the Australian market but not for Japanese, Canadian and British markets.

II. REVIEW OF LITERATURE

Bodla BS, Kiran Jindal (2006), in their study found that the returns of the Month Effect and Semi Monthly Effect were prevalent in the Indian Stock Market. Eleftherios Giovannis (2009) in his study found that the semi-month effect, where in 7 and 2 cases we accept for both fortnights that there are significant lower and higher returns, while in additional cases it is accepted that the hypothesis there are significantly lower returns in the second fortnight in India and higher returns in the first fortnight for Canadian stock index. Nageswari P, Selvam M, Karpagam V (2011), in their study found that the mean returns in the First Half of Calendar Month were lower than the mean returns in the Second Half of the Calendar Month during the study period. The paper reports an Insignificant Semi-Monthly Effect across all years. Nageswari. P, DR.M. Selvam and DR.J. Gayathri (2011) in their study entitled “AN EMPIRICAL ANALYSIS OF SEMI MONTH AND TURN OF THE MONTH EFFECTS IN INDIA STOCK MARKET” examines the return of the month effect in Indian stock market. The study has been carried out to find how bad news and good news is reflected stock prices. The study considers S & P CNX Nifty and BSE Sensex data for six years from 1st January 2005 to 31st December 2010. The collected data are analysed by applying ‘t’ test. The result of the study disclose that highest mean return was recorded for the first half of the month than the rest of the days in the month. Result of the study also shows that the semi-month effect and turn of the month effect was not prevalent in the Indian stock market during the study period. By analysing these anomalies in Indian stock market it is concluded that most of the cash flow entered in the Indian stock market in first few days of the month, as a result indices stock prices to move upward. Ushad Subadar Agathee (2009) in his study found that whether or not there exists semi-monthly on the SEMDEX return data for the period August 2006 to May 2009. When individual years are considered separately, the paper reports an insignificant semi-monthly effect across all years.

III. OBJECTIVE OF THE STUDY

To identify the existence of the Semi month Effect in Indian Health Care sector.

IV. RESEARCH METHODOLOGY

This study is analytical in nature. Secondary data collected from the BSE web portal for the period ranging between April 2006 and March 2015.

V. FRAMEWORK OF ANALYSIS

The collected data have been analysed by making use of Descriptive statistics like as Mean, Standard Deviation,
VI. LIMITATION
Considering the continuity of data, the only BSE HC Index has been selected for the study. Hence, utmost care is exercised while generalizing the result.

VII. ANALYSIS AND INTERPRETATION
To find the mean returns, volatility and Normality in the BSE Health Care index descriptive Statistics like Mean, Standard deviation, Variance, Skewness, Kurtosis, and Shapiro-Wilk test are made use of the following table narrates the result of descriptive study.

<table>
<thead>
<tr>
<th>Statistics</th>
<th>First Half</th>
<th>Second Half</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>.1106</td>
<td>.0003</td>
</tr>
<tr>
<td>Median</td>
<td>.1400</td>
<td>.0466</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>1.19140</td>
<td>1.17206</td>
</tr>
<tr>
<td>Variance</td>
<td>1.419</td>
<td>1.352</td>
</tr>
<tr>
<td>Skewness</td>
<td>-.967</td>
<td>-.808</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>6.877</td>
<td>6.700</td>
</tr>
<tr>
<td>Minimum</td>
<td>-8.93</td>
<td>-9.06</td>
</tr>
<tr>
<td>Maximum</td>
<td>5.06</td>
<td>7.23</td>
</tr>
<tr>
<td>Shapiro-Wilk</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source – Database collected from BSE web portal and computed.

Table 1: Statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Paired t value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Half</td>
<td>.1106</td>
<td>1087</td>
<td>1.19140</td>
<td>2.200</td>
<td>.028</td>
</tr>
<tr>
<td>Second Half</td>
<td>.0003</td>
<td>1087</td>
<td>1.17206</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source – Database collected from BSE web portal and computed.

This implies that the Indian stock market may not efficiently with available information. As a consequence, perhaps investors can expand their returns by timing their investments.

The result of the study raises the question efficient market hypothesis which states that stock prices are random, and that investors cannot make abnormal profits using past prices. The Semi month effect patterns in return and volatility can enable investors to take advantage of moderately regular market shifts by manipulative and implementing trading strategies, which account for such predictable patterns. Specially, our results indicate lower returns on Second half of the month and maximum returns on a First half of the month in the BSE HEALTH CARE index. So, the specific trading regulation that could be conceived of being that one could consider buying the scripts for every month second half (buy low) and selling them on an every month First half (sell high). However, this tactic essentials to be implemented with caution. We suggest is that investors could experimentation the above policy, to start with, on small stocks and extend the same on blue-chips based on the risks and rewards. This advantages further energy as Indian markets are more translucent and are open to the worldwide investors seeking profitable trade opportunities.
REFERENCES


Websites


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