A STUDY ON EQUITY SHARE PRICE VOLATILITY OF SELECTED PRIVATE BANKS IN (NSE) STOCK EXCHANGE

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ABSTRACT

Banks play a vital role in building the economics of an individual as well as nation. In India banking sector has greater importance as its forms the lifeline of economic activity of both rural and urban areas. So the Changes in stock price volatility of banks will be influencing the individual as well as nation further the study analyzed the a group of select banks and its market volatility by using mean, standard deviation and beta value using the opening and closing prices.

KEYWORDS: Banking, Volatility, Stock Market

INTRODUCTION

National Stock Exchange (NSE) is to enable the investors to purchases/ sale the shares and securities from anywhere in India online trading which is real time trading done by National Stock Exchange (NSE) played a catalytic role reforming the Indian securities marketing in terms of micro structure, market prices and trading volumes.

An investor try to maximize their return in the finance field, if the return is higher, risk associated with it is also higher. Return and risk go together and there should be tradeoff. All investments are risky to some degree or other. The art of investment is to see that the return is maximizing with the minimum of risk. The stock exchange or secondary market is a highly organized market for the purchase and sale of second hand quoted of listed securities. Bombay Stock Exchange Sensitive Index has the common name i.e. Sensex. Bombay Stock Exchange comprises of the most actively traded and 30 largest stocks, which are representatives of various stocks in BSE.

In the finance field, it is common that the money or finance is scarce and investors try to maximize their return. If the return is higher, risk associated with it is also higher. Return and risk go together and there should be tradeoff. All investments are risky to some degree or other. The art of investment is to see that the return is maximizing with the minimum of risk. So in order to minimize the risk the market information is essential.

Stock Exchange

The Secondary market in the stock exchange is a highly organized market for the purchase and the sale of second hand quoted of listed securities. The securities contract (regulation) act 1956 defines a stock exchange as “an association, organization, or not, established for the purpose of assisting, regulating, and controlling, business in buying, selling, dealing and securities”.

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National Stock Exchange

The National Stock Exchange (NSE) is India's leading stock exchange covering various cities and towns across the country. NSE was set up by leading institutions to provide a modern, fully automated screen-based trading system with national reach. The Exchange has brought about unparalleled transparency, speed & efficiency, safety and market integrity. It has set up facilities that serve as a model for the securities industry in terms of systems, practices and procedures.

COMPANY PROFILE INTEGRATED ENTERPRISE (INDIA) LIMITED

Integrated Enterprise (India) Limited was promoted by industrialist and financial expert Mr. Sriram, Founder Director of Integrated Enterprise (India) Limited.

Integrated enterprise (India) limited was founded with the vision built on the concept of educate and empower the investors to make the better investment decisions through quality advice and superior service. As a chairman of Integrated Enterprise (India) Limited and its associate companies, he has been instrumental in building the business model for Integrated Enterprise (India) Limited.

The vision of its founder is taken forward by its directors, comprising experts in the industries. Mr. V. Krishnan has three decades exposure to various aspects of business administration. Mr. N. Gopalaswamy has three decades ITES specialized experience. Integrated Enterprise (India) Limited has invested Rs.50 million in IT enabling the company to ensure robots delivery of processors and enhance transparency in operation.

Our Business

- Investments
- Mutual funds
- IPO
- DEMAT services
- Secondary market
- Depository service
- Corporate service
- Tax service

RESEARCH METHODOLOGY

Introduction

Research is common parlance to a search for knowledge. One can also define as a scientific and systematic, search for certain information on specific topic in fact is an alt of scientific investigation. Some people consider research is movements from known to unknown. According to Clifford woody research comprises defining and redefining problems, formulating hypothesis, suggested solutions, collecting, organizing and at last carefully testing the conclusion to determine whether they fit the formulating hypothesis.
STATEMENT OF THE PROBLEM

- High volatility during the Period of oct-dec
- Beta value changes day by day
- Stock Market volatility on equity Creates and impact on firms financial growth
- Private sector equites have a different face over public limited firms

OBJECTIVES OF THE STUDY

- To analyze the Causes for the Changes in Equity prices
- To study the factors that helps the investors for a best investment option
- To portray the significance of Beta value and calculated beta of equities in the market.

RESEARCH DESIGN

The researcher has to use facts or information already available and analyze these facts to make a critical evaluation of the material. The researches in this study have applied an analytical research design using balance sheet statement since the data and information’s collected are already available. The main source is the company’s audited annual reports.

Data Collection

Primary Data

- Annual report of company
- Manual of instructions on loans and advances
- Articles and Research Papers

Source of Data

- The study is based on secondary data only.
- The data have been collected from books, journals, NSE Bankex &Integrated Enterprises India LTD.

Period of Study

The present study is undertaken to analyze the volatility of equity share price of select banking companies for the period 2013 to 2014 of monthly closing prices. The study is based on before and after financial crisis periods.

Methods of sampling

Five Private banking companies are selected for the study. The selection is based on mostly traded in BSE Bankex and availability of data, Purposive sampling technique is used in this study.
Top Five Private Banks mostly traded in NSE Bankex are:

- ICICI Bank
- HDFC Bank
- Axis Bank
- Punjab National Bank
- Indusind Bank

**Tools of Analysis**

Tools used in this study are

- Mean
- Standard Deviation
- Beta Calculation

**Mean**

When used without specification, “mean” refers to the arithmetic average of a data set. To calculate mean, add all the values in the data set and divide by the number of observations.

\[
\bar{X} = \frac{\sum X}{N}
\]

Where,

\(\bar{X}\) (Sometimes call the X-bar) is the symbol for mean,

\(\sum\) (The Greek letter sigma) is the symbol for summation,

\(X\) is the symbol for the scores,

\(N\) is the symbol for the number of scores.

**STANDARD DEVIATION**

Standard deviation is measure of dispersion of a set of data from its mean. The more spread apart the data, the higher the deviation. Standard deviation is calculated as the square root of variance.

\[
\sigma = \sqrt{\frac{\sum(x-\bar{X})^2}{N}}
\]

Where,

\(\sigma\) = the standard deviation,
x = each value in the population,

\[
\bar{x} = \text{the mean of value},
\]

N = the number of values (the population).

**Beta**

A measure of the volatility, or systematic risk, of a security or a portfolio in comparison to the market as a whole. Beta is used in the capital asset pricing model (CAPM), a model that calculates the expected return of an asset based on its beta and expected market returns.

When standard deviation determine the volatility of a fund according to the disparity of its returns over a period of time, beta, another useful statistical measure, determines the volatility (or risk) of a fund in comparison to that of its index or benchmark. A beta greater than 1 indicates greater volatility than the overall market, and a beta less than 1 indicates less volatility than the benchmark.

\[
\beta = \frac{\text{Opening price-closing price}}{\text{No. of days}}
\]

**ANALYSES AND INTERPRETATION**

<table>
<thead>
<tr>
<th>Month</th>
<th>Volatility of Equity Share Price (in Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>April-June</td>
<td>1367.13, 0.051</td>
</tr>
<tr>
<td>July-Sep</td>
<td>1494.7, 0.542</td>
</tr>
<tr>
<td>Oct-Dec</td>
<td>1207.56, 9.19</td>
</tr>
<tr>
<td>Jan-Mar</td>
<td>347.37, 5.0</td>
</tr>
</tbody>
</table>

**Inference**

From the above table shows the highest mean value as 1494.7 in the month of july-september, lowest mean value of 347.37 in the during the month January-march. And the highest standard deviation 9.19 in the month october-december lowest standard deviation 0.051 in the month april-june. It indicates high volatility of the study period.
Inference

From the above table shows the highest mean value as 688.07 in the month of January-march, lowest mean value of 631.12 in the during the month July-September. And the highest standard deviation 6.54 in the month January-march lowest standard deviation 0.015 in the month july-september. It indicates high volatility of the study period.

Table 3: Equity Share Price of AXIS Bank

<table>
<thead>
<tr>
<th>2013-14</th>
<th>Volatility of Equity Share Price (in Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month</td>
<td>Mean</td>
</tr>
<tr>
<td>April-June</td>
<td>1383.46</td>
</tr>
<tr>
<td>July-Sep</td>
<td>1077.01</td>
</tr>
<tr>
<td>Oct-Dec</td>
<td>1183.76</td>
</tr>
<tr>
<td>Jan-Mar</td>
<td>1222.98</td>
</tr>
</tbody>
</table>

Inference

From the above table shows the highest mean value as 1383.46 in the month of april-june, lowest mean value of 1077.01 in the during the month July-September. And the highest standard deviation 2.42 in the month october-december lowest standard deviation 1.38 in the month july-september. It indicates high volatility of the study period.

Table 4: Equity Share Price of Punjab National Bank

<table>
<thead>
<tr>
<th>2013-14</th>
<th>Volatility of equity share price (in Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month</td>
<td>Mean</td>
</tr>
<tr>
<td>April-June</td>
<td>753.74</td>
</tr>
<tr>
<td>July-Sep</td>
<td>538.77</td>
</tr>
<tr>
<td>Oct-Dec</td>
<td>538.68</td>
</tr>
<tr>
<td>Jan-mar</td>
<td>594.16</td>
</tr>
</tbody>
</table>

Inference

From the above table shows the highest mean value as 753.74 in the month of april-june, lowest mean value of 538.68 in the during the month october-december. And the highest standard deviation 5.71 in the month april-june lowest standard deviation 1.43 in the month july-september. It indicates high volatility of the study period.

Table 5: Equity Share Price of INDUSIND Bank

<table>
<thead>
<tr>
<th>2013-14</th>
<th>Volatility of Equity Share Price (in Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month</td>
<td>Mean</td>
</tr>
<tr>
<td>April-June</td>
<td>471.21</td>
</tr>
<tr>
<td>July-Sep</td>
<td>409.65</td>
</tr>
<tr>
<td>Oct-Dec</td>
<td>423.03</td>
</tr>
<tr>
<td>Jan-Mar</td>
<td>426.37</td>
</tr>
</tbody>
</table>

Inference

From the above table shows the highest mean value as 471.21 in the month of april-june, lowest mean value of 409.65 in the during the month July-september. And the highest standard deviation 9.60 in the month January-march lowest standard deviation 1.58 in the month October-december. It indicates high volatility of the study period.
Beta Calculation

Table 6: Equity Share Price of ICICI Bank Beta Value

<table>
<thead>
<tr>
<th>Month</th>
<th>Calculation Beta Value</th>
<th>Market Beta Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>April-June</td>
<td>0.31</td>
<td>1.81</td>
</tr>
<tr>
<td>July-Sep</td>
<td>2.57</td>
<td>1.27</td>
</tr>
<tr>
<td>Oct-Dec</td>
<td>4.77</td>
<td>2.82</td>
</tr>
<tr>
<td>Jan-Mar</td>
<td>1.39</td>
<td>3.24</td>
</tr>
</tbody>
</table>

Inference

From the above table it shows that there was a decreasing trend of beta with the S&P 500 market value of 4.77 to 1.39 during the period from October to March.

Table 7: Equity Share Price of HDFC Bank Beta Value

<table>
<thead>
<tr>
<th>Month</th>
<th>Calculation Beta Value</th>
<th>Market Beta Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>April-June</td>
<td>1.17</td>
<td>1.02</td>
</tr>
<tr>
<td>July-Sep</td>
<td>1.78</td>
<td>1.25</td>
</tr>
<tr>
<td>Oct-Dec</td>
<td>0.69</td>
<td>2.17</td>
</tr>
<tr>
<td>Jan-Mar</td>
<td>1.60</td>
<td>2.55</td>
</tr>
</tbody>
</table>

Inference

From the above table it shows that there was a decreasing trend of beta with the S&P 500 market value of 1.78 to 0.69 during the period from July to Dec.

Table 8: Equity Share Price of AXIS Bank Beta Value

<table>
<thead>
<tr>
<th>Month</th>
<th>Calculation Beta Value</th>
<th>Market Beta Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>April-June</td>
<td>1.40</td>
<td>1.70</td>
</tr>
<tr>
<td>July-Sep</td>
<td>7.37</td>
<td>2.23</td>
</tr>
<tr>
<td>Oct-Dec</td>
<td>1.3</td>
<td>2.76</td>
</tr>
<tr>
<td>Jan-Mar</td>
<td>4.17</td>
<td>3.09</td>
</tr>
</tbody>
</table>

Inference

From the above table it shows that there was a decreasing trend of beta with the S&P 500 market value of 7.37 to 1.3 during the period from July to Dec.

Table 9: Equity Share Price of Punjab National Bank Beta Value

<table>
<thead>
<tr>
<th>Month</th>
<th>Calculation Beta Value</th>
<th>Market Beta Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>April-June</td>
<td>0.98</td>
<td>1.70</td>
</tr>
<tr>
<td>July-Sep</td>
<td>3.77</td>
<td>1.12</td>
</tr>
<tr>
<td>Oct-Dec</td>
<td>1.02</td>
<td>2.89</td>
</tr>
<tr>
<td>Jan-Mar</td>
<td>1.46</td>
<td>4.03</td>
</tr>
</tbody>
</table>

Inference

From the above table it shows that there was a decreasing trend of beta with the S&P 500 market value of 3.77 to 1.02 during the period from July to Dec.
Table 10: Equity Share Price of INDUSIND Bank Beta Value

<table>
<thead>
<tr>
<th>Month</th>
<th>Calculation Beta Value</th>
<th>Market Beta Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>April-June</td>
<td>0.67</td>
<td>1.06</td>
</tr>
<tr>
<td>July-Sep</td>
<td>2.62</td>
<td>1.56</td>
</tr>
<tr>
<td>Oct-Dec</td>
<td>0.40</td>
<td>0.75</td>
</tr>
<tr>
<td>Jan-Mar</td>
<td>0.51</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Inference

From the above table it shows that there was a decreasing trend of beta with the S&P 500 market value of 2.62 to 0.40 during the period from July to Dec.

FINDINGS

From the study it was observed that the causes for the changes in equity prices is due to market fluctuation and also it based on the closing price of the particular equity price.

It was observed that the standard deviation of equity volatility is comparatively higher during the following months.

- ICICI BANK – OCT-DEC S.D. 9.19
- HDFC BANK – JAN-MAR S.D. 6.54
- AXIS BANK – OCT-DEC S.D. 2.42
- PUNJAB NATIONAL BANK JAN-MAR S.D. 5.71
- INDUSIND BANK JAN-MAR S.D 9.69

In order to calculate of equity volatility beta value plays a significant role in finding out the share stability. It was found that the below mentioned banks and its higher beta value was stated below.

- ICICI BANK – OCT-DEC 4.77 of 2.82
- HDFC BANK – JULY-SEP 1.78 of 1.25
- AXIS BANK – JULY-SEP 7.37 of 2.23
- PUNJAB NATIONAL BANK – JULY-SEP 3.77 of 1.12
- INDUSIND BANK – JULY-SEP 2.62 of 1.56

SUGGESTIONS

- The investors in the equity have to find out the draw backs of market fluctuation over a period of time, which will strengthen their investment decision.
- From the study the selected five different private banks are different in their operations even the share volatility is similar for all the selected private banks.
The study observed that the investment strategy equity is highly risker than other standard deviation and beta value will provide a pathway to choose the best equity.

CONCLUSIONS

Banking in India has been vast functioning enterprise even when the rest of the world facing turmoil of depression. The reign of financial period made some noticable alterations in the banking sector of the economy. The alterations were both favorable and unfavorable to the sector. Such sector works for the development of economy on all phases. Thus, the earning capacity of each and every banks should be made visible in order to make investors attain market knowledge. The study is such an attempt, to examine the volatility of selected private banking companies in India listed in NSE for providing valuable information to investors to succeed.

REFERENCES
