



Volatility In Indian Stock Markets

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ABSTRACT

Volatility estimation is important for several reasons and for different people in the market. Pricing of securities is supposed to be dependent on volatility of each asset. This paper is focused on the volatility of stocks invested on Indian stock Exchange, It gives various factors which are responsible for volatility and suggest better investment decision based on calculated PE and EPS of 2 companies. It gives an overview of the company's stock and its performances over a period of time 5th May 2011 to 5th July 2011. In short a study attempts to suggest the investor to invest in the stock recommended by the company Alpha INVESCO Research Pvt. Ltd.

Keywords :

Introduction

As a concept, volatility is simple and intuitive. It measures variability or dispersion about a Central tendency. To be more meaningful, it is a measure of how far the current price of an asset deviates from its average past prices. Greater this deviation, greater is the volatility. At a more fundamental level, volatility can indicate the strength or conviction behind a price move. Volatility plays a key role in assessing the risk/return tradeoffs and forms an important input in asset allocation decisions.

In finance, volatility is a measure for variation of price of a financial instrument over time. Historic volatility is derived from time series of past market prices. An implied volatility is derived from the market price of a market traded derivative (in particular an option).

Earnings per share (EPS)

This is the net profit divided by the number of shares outstanding. The EPS as an absolute figure means nothing and is significant only when viewed in relation to the price of the stock. It simply means how much one share of the company is earning.

Net Profits ÷ Number of Shares

That means each share of the company earns profit of 10 Rupees. Earnings per share is a derived formula. It decides how much PE Ratio will be given to any company. PE Ratio is a variable factor. It keeps moving up & down, depending on the profit growth & performance of the company.

General assumption is; lower the PE is, cheaper the stock is! And high PE means the stock is expensive. FALSE! Markets pay high PE to companies who are going to show high growth rate & lower PE ratio to stocks that are going to grow at slow pace. The greatest amount of wealth is generated in PE expansion phase. And the biggest wealth is destroyed during PE contraction. But what does it exactly mean? Let's have a look.

PE Expansion Phase:

In the initial phase market does not believe in small company's growth, therefore markets will give it a low PE. But once the market participants realize that the company is growing rapidly or at a consistent high growth rate, the markets will give it a higher PE. This is called as PE re-rating. Now what is company's growth? It is increase in company's net profit

along with its sales.

Example: Stock price of ABC Limited is trading at 50 Rupees & the company is growing at 30% per year since 2008. It has 1 crore shares in the market & its net profit in 2009 is 10 crores, translating into EPS of 10 Rupees. It shows the company is trading at a PE ratio of 5.

The company's net profit grows to 13 crores in 2010. That means a 30% growth in profits. If the company is poised to grow at the same rate in coming years, the markets will notice the stock. And participants are willing to pay high PE ratios during such phase. So the PE ratio of this company gets re-rated from 5 to 20. Now the company's EPS is 13 Rupees (Net Profit ÷ No of shares). The stock price suddenly shoots to 260 levels from 50 (EPS of 13 X PE of 20)! A rise of more than 6 times in a year.

Now in 2011, the company continues to grow at 30%. It posts a net profit of 17 Crores, translating into EPS of 17 Rupees per share. Since the company continues to grow at 30%, markets are willing to pay it a higher PE ratio of 30. This translates in to a stock price of 510. The stock of ABC Limited moves from 50 Rupees to 500 Levels. This is how, the stocks which are trading at dirt cheap rates for many years, suddenly start a multiyear rally and go up by 5 - 10 - 15 - 20 times & even more. Pantaloon, Titan, TRF are some of the examples in the last Bull Run. Nobody noticed these stocks till 2003-2004. When these companies showed a consistent growth & better future prospects, they went up by many times making intelligent investors multi-millionaires.

Contraction Phase:

We will continue with the example of ABC Limited. ABC limited continues to grow at 30% till 2012. With a profit of 22 crores & an EPS of 22 Rupees & PE ratio of 30, the stock price is trading at around 700 levels. The company has reached its peak in terms of growth & growth rate slows down to 15% in 2013. And the slow growth is likely to continue for few more years. Now the stock markets will realize this thing and market participants are not willing to pay such a high PE for a slow growing company. This is called as PE de-rating.

In 2013, the company posts a net profit of 25 crores, translating in to EPS of 25 Rupees. Markets will de-rate the PE since the growth is slowing down. The market de-rates its PE to 15. So the stock price falls to 375. Even after company posted

an increase in net profits the stock price fell from 700 to 375!

In 2014, company's growth rate falls in to negative territory. It posts a net profit of 20 crores & EPS of 20 Rupees. The market will further de-rate its PE to 10 because of the negative growth. And the stock price will fall further to 200 Rupees.

The company is still a profit making organization, but the stock price fell from 700 to 200 just because it is slowing down. This is what common investors need to understand. Recent examples of PE de-rating are telecom companies like Idea, Bharti, Reliance Communications. These three companies are excellent companies with good management. But their growth rate is slowing down. Though they are showing increase in their net profits from last 6 months, markets are de-rating their PE. Because of this reason, their stocks have fallen between 40 to 70 % from their all time highs.

And as usual, common investors are buying these slow growing companies just because their stock prices have fallen too much & they are 'BLUE CHIP' companies.

We can summarize the example of ABC limited in following table. This is how multibagger charts are made. Investors, who enter early, benefit the most. And common investors who buy the stock when it becomes a HOT stock, it is discussed all over media etc. They end up in buying a good company at a bad price and bad time & get stuck.

Factors responsible for price fluctuations

In stock market, price or returns fluctuate for a variety of reasons: changes in fundamental factors like investors endowments, tastes or alternatively the attitudes towards risk, correct or incorrect anticipations and other market participants, differences in information and mode of evaluation, transient imbalances between demand and supply of stocks and the nature and number s stabilizing forces, among others, cause prices to fluctuate either from the point of one point equilibrium to another or above or below an equilibrium point. The changes in the fundamental factors causes price or returns to shift from one point of equilibrium to another. For instance, information regarding changes in the economy, changes in the policies, including industrial policy, as also the political situation and the social situation, influence the overall price behavior of market. Types of volatility.

We receive volatility in three contexts:

- Historical volatility
- Implied volatility
- Projected volatility

Historical volatility:

It refers to the movements which have been observed in particular stock price or index over a given period of time. The volatility can be measured by using the past data on prices (or index) and expressed by any manner of the Beta and coefficient correlation. For this purpose daily, monthly data may be taken

Thus, we may determine volatility for any set of data and compare the historical data with the prevailing conditions.

• Implied volatility:

Implied volatility is a key variable required for determining premium on option. The standard deviation of the instantaneous rate of return on the stocks cannot be observed. We may estimate its values from historical data.

• Projected volatility:

This refer to the estimate of future volatility on the basis of past volatility, current market analysis, perception of the investor. Statistical tools used for the calculation of volatility.

• Beta

Beta measures the diversifiable risk. Beta shows the price of the stock respond to the market forces. In-effect the more

responsive the price of the stock is to changes in the market, higher will be the beta. Beta is calculated by relating to the returns on the stocks in relations to the returns for the market. It can be positive or negative.

Beta for each stock calculated using daily opening and closing share price each company and corresponding daily stock exchange sensx. First rate of return of the company and the rate of return of the stock market are calculated. Coefficient of correlation is a statistical technique, which measure the degree or extent to which two or more variable fluctuate with reference to one another. Correlation analysis helps in determining the degree of relationship between two variables.

The calculated as follows:

Rate of return: Share price in the closing - Share price at the opening

Share price at the opening

Computation of Beta:

$$\beta = \frac{N\sum XY - (\sum X)(\sum Y)}{N\sum x^2 - \sum (x^2)}$$

This is the most commonly used measure risk in finance. It square also is widely used to find out the risk associated with a security.

Coefficient of correlation:

$$r = \frac{N\sum XY - (\sum X)(\sum Y)}{[(N\sum (y^2) - \sum y^2)(N\sum (x^2) - \sum x^2)]^{1/2}}$$

$\alpha = \bar{Y} - \beta (\bar{X})$
Where $\bar{Y} = \sum Y/N$ and $\bar{X} = \sum X/N$

Where β measure the changes in the dependent variable in responds to a unit change in independent variable. While a measure the value of independent variable even then independent variable has zero value.

Need and importance of study

In the stock markets, people think too little and calculate too much! Stick to the basics, and be a winner in investing. In the study too much of calculations, figures, charts, projections and mathematics are been avoided.

There are basic elements while handling the money, which many ignore and that is why majority of the people burn their hands in financial/investments decisions. It comprises of myths & realities behind PE Ratio's & Stock Price movements.

Markets pay high PE to companies who are going to show high growth rate & lower PE ratio to stocks that are going to grow at slow pace. The greatest amount of wealth is generated in PE expansion phase. And the biggest wealth is destroyed during PE contraction. Therefore the study of volatility of stocks is very important contextual as well. Hence analytical study on the volatility of stocks invested on Indian stock Exchange is the topic of this dissertation.

Objective of the study

- To study on the volatility of stocks invested on Indian stock Exchange
- To find out various factors which are responsible for volatility
- To suggest better investment decision based on calculated PE and EPS of 2 companies

Sample size

The two companies are the major players in the economy and are part of sensx. Only two and half month duration is taken (5th May 2011 -5th July 2011). This sample well describes the population, Venkys (India) Limited a part of the VH Group is an integrated poultry group in Asia. The company's principal activities are to own and operate chicken and broiler breeding farms,

IFB Industries Limited is the home appliance industry com-

prising refrigerators, Washing machines, microwaves and air conditioners grew by 15-20% in 2010. India is currently the twelfth largest consumer market in the world. According to a study by McKinsey Global Institute, India is likely to join the premier league of the world's consumer market by 2025 improving its position to the fifth.

Actual collection of data

Basically, the data used in this dissertation is secondary in nature. This appeared in the Media, the company's quarterly reports and from the website of stock exchange. Past two and half month daily closing has been used in the dissertation. 63 days daily stock price have been used for each company to the application of beta, correlation coefficient, which are used to measure volatility of shares.

Techniques used for data analysis

Basically whole data analysis has been performed using spreadsheet in excel by using different statistical functions inbuilt in excel. The following statistical functions have been employed during the data analysis.

Average: calculates the average of a given data

Correlation: calculate the coefficient of correlation between Market Return and the companies return

Sigma: calculate the summation of the data

Company Profile

The BULLS-book newsletter was started in November 2008. After getting positive response from all our initial associates, the idea was born to form a company & make our services available to a larger audience. BULLSbook is a subsidiary of Pune based equity research & consulting firm, Alpha Invesco Research (P) Ltd. The company was incorporated in June 2009 with sheer aim to provide world class and state of the art advisory for investors willing to invest in the Indian stock markets. The Alpha Invesco team is a blend of young minds with innovative ideas & hands on experience in stock markets. The company is headed by Mr. Chetan Phalke, Founder Director. Successful analyst and investor since 2002, he brings in his 7 years of experience & expertise to invest in high growth stocks. He is a science graduate from Pune University. He has done business management from Symbiosis & Masters in Economics from Fergusson College, Pune

Why BULLS-book

Just like most of the common investors, at the beginning of our careers, BULLSbook tried various things like intraday trading, IPO's, Mutual Funds, hot tips from friends/brokers etc. Fortunately at an early stage BULLSbook realized and learnt the correct way & moved on to our journey to success. But just like many, they were disappointed with lack of quality advice & knowledge. They found that no one from brokers, mutual fund agents, so called experts in media & newspapers are willing to educate common investors in a productive manner. Instead they bombard BULLSbook with too much of information & views that leaves us nowhere but confused. BULLSbook wants investor to get educated on how the markets function in reality; it wants the investor to invest in wealth creating stocks to be a successful investor. Just like they did it for themselves.

How

After doing research of all the stocks which have gone up anywhere between 10 to 50 times & even more since 2003 in Indian as well as Global stock markets ,BULLSbook found many similarities in the basic characteristics of such stocks.

At BULLSbook we are always looking for stocks with the similar characteristics and the good news is that, we successfully found such stocks in the past, and we'll continue our work to find more stocks like these!

Every great company has some sort of business priority

which they stick to and expand on. In fact, this is the best time to invest in great companies, especially when there are so many such companies in India to invest in.

Walking on a path of legendary investors, we consider six categories before investing in any stock.

These stocks are small & aggressive. They can make your career. Their PE expands along with the earnings. If the company starts growing at rapid pace, the market values it accordingly. Here is an illustration of how the multibagger charts are made.

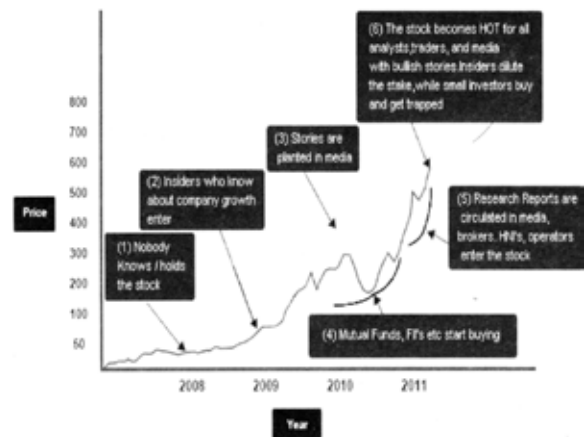
Out of these, BULLSbook focus on finding companies from no 3 category, fast growers. This is where the markets give stocks that move up by 10 times, 20 times, 50 times and even 100 times. These stocks are small & aggressive. They can make your career. Their PE expands along with the earnings. If the company starts growing at rapid pace, the market values it accordingly. Here is an illustration of how the multibagger charts are made.

| Year | Company Name | EPS (earning per share) | PE (price to earnings) | Stock Price |
|------|--------------|-------------------------|------------------------|-------------|
| 2008 | xyz ltd | 8 | 5 | 40 |
| 2009 | xyz ltd | 10.5 | 5 | 52.5 |
| 2010 | xyz ltd | 14 | 30 | 420 |
| 2011 | xyz ltd | 18 | 40 | 720 |

Total Risk:

The Mean Variance Approach provides Total Risk is comprises of two components:

1. Systematic Risk
 2. Unsystematic risk
- Systematic risk: The Systematic risk of a security is measured by a statically measure called Beta. To calculate P the data required is returns of individual securities and returns of stock market index
 - Unsystematic risk: Unsystematic risk is specific or unique to the company and can be controlled. It can be controlled by using the concept known as diversification of investment which means combining particular security with another security have opposite characteristics as a result of diversification that investment is spread over a group of securities with different characteristics. This group of securities is known as Portfolio.



As far as the investor is concerned, unsystematic risk is not important and it can be reduced or eliminated through diversification. Hence known as irrelevant Risk. For the investment purpose the relevant risk is systematic risk which is undiversifiable. Hence investor interested in measurement or quantification of systematic Risk.

The following are the recommended stocks by Alpha Invesco Research Pvt Ltd. They are:

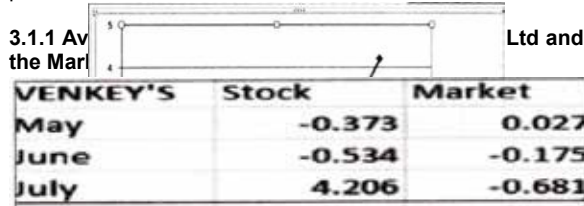
1. Venkys (India) Ltd

Venkys (India) Ltd, a part of the VH Group is an integrated poultry group in Asia. The company's principal activities are to own and operate chicken and broiler breeding farms. Their portfolio include animal health products, pellet feeds, processed, and further processed chicken products, solvent oil extraction, SPF eggs, nutritional health products for humans, and pet food & health care products. The company has 30 units spread across India. Venkys (India) Ltd formerly known as Western Hatcheries Ltd was incorporated in the year 1976 as a private limited, mainly to produce day-old layer and broiler chicks for the dense poultry markets of North India. The company was promoted by Dr B V Rao. The company was converted into a public limited company on December 12, 1998. Over the years, the company embarked upon new ventures in regular succession, adding tremendous value to the company, giving it an edge in technology and high returns on investment.

I.I Venkys (India) Ltd

| VENKEY'S STOCK PR SENSEX PStock Ret Market Return | | | | | | | | | | |
|---|--------|----------|-------|--------|----------|----------|---------|--|--|--|
| Date | open | open | Y | X | X*Y | X^2 | Y^2 | | | |
| 5-May | 673 | 18484.71 | -3.95 | -0.014 | 0.055 | 0.0001 | 15.602 | | | |
| 6-May | 673 | 18289.78 | 2.71 | 1.25 | 3.387 | 1.562 | 7.344 | | | |
| 9-May | 678 | 18628.63 | -1.3 | -0.53 | 0.689 | 0.28 | 1.89 | | | |
| 10-May | 692 | 18564.95 | 3.9 | -0.26 | -1.014 | 0.067 | 15.21 | | | |
| 11-May | 699 | 18572.61 | -0.38 | -0.066 | 0.025 | 0.004 | 0.144 | | | |
| 12-May | 696.15 | 18525.32 | -1.51 | -1.023 | 1.544 | 1.046 | 2.28 | | | |
| 13-May | 676.3 | 18362.45 | -1.76 | 0.919 | -1.618 | 0.845 | 3.097 | | | |
| 16-May | 667 | 18492.68 | -2.63 | 0 | 0 | 0 | 6.916 | | | |
| 18-May | 647 | 18177.32 | -1.91 | -0.5 | 0.955 | 0.25 | 3.648 | | | |
| 19-May | 634 | 18166.64 | -2.05 | -0.138 | 0.282 | 0.019 | 4.202 | | | |
| 20-May | 624.9 | 18199.96 | -3.85 | 0.693 | -2.668 | 0.48 | 14.822 | | | |
| 23-May | 597.45 | 18269.06 | -5.85 | -1.509 | 8.827 | 2.277 | 34.272 | | | |
| 24-May | 569 | 18016.43 | 5.68 | -0.024 | -0.136 | 0.0005 | 32.262 | | | |
| 25-May | 583.35 | 17976.36 | 0.08 | -0.718 | -0.057 | 0.515 | 0.006 | | | |
| 26-May | 599 | 17917.11 | -1.26 | 0.711 | -0.895 | 0.505 | 1.587 | | | |
| 27-May | 603 | 18105.61 | 2.58 | 0.886 | 2.285 | 0.784 | 6.656 | | | |
| 30-May | 616 | 18319.74 | 2.68 | -0.478 | -1.281 | 0.228 | 7.182 | | | |
| 31-May | 633 | 18266.61 | 2.09 | 1.295 | 2.706 | 1.677 | 4.368 | | | |
| 1-Jun | 641.95 | 18527.12 | 1.44 | 0.44 | 0.633 | 0.193 | 2.073 | | | |
| 2-Jun | 630.5 | 18425.85 | -3.18 | 0.37 | 1.176 | 0.136 | 10.112 | | | |
| 3-Jun | 627 | 18594.4 | -0.01 | -0.958 | 0.009 | 0.919 | 0.0001 | | | |
| 6-Jun | 621.6 | 18344.27 | -0.02 | 0.413 | -0.008 | 0.17 | 0.0004 | | | |
| 7-Jun | 620 | 18355.3 | 1.93 | 0.764 | 1.474 | 0.583 | 3.724 | | | |
| 8-Jun | 639.4 | 18448.4 | 0 | -0.293 | 0 | 0.085 | 0 | | | |
| 9-Jun | 631.05 | 18394.57 | -2.52 | -0.052 | 0.132 | 0.002 | 6.35 | | | |
| 10-Jun | 620 | 18390.41 | 0 | -0.662 | 0 | 0.439 | 0 | | | |
| 13-Jun | 619.7 | 18242.25 | -2.26 | 0.13 | 0.294 | 0.016 | 5.107 | | | |
| 14-Jun | 610.95 | 18276.78 | -0.6 | 0.174 | -0.104 | 0.03 | 0.36 | | | |
| 15-Jun | 605.5 | 18298.59 | -1.39 | -0.909 | 1.263 | 0.826 | 1.932 | | | |
| 16-Jun | 584.7 | 18060.11 | -4.12 | -3.99 | 16.441 | 15.924 | 16.974 | | | |
| 17-Jun | 578 | 18060.11 | 0.52 | -1.05 | 0.546 | 1.102 | 0.27 | | | |
| 20-Jun | 582.65 | 17925.17 | -4.45 | -2.33 | 10.368 | 5.428 | 19.802 | | | |
| 21-Jun | 553 | 17585.31 | 1.65 | -0.14 | -0.231 | 0.019 | 2.722 | | | |
| 22-Jun | 561.65 | 17659.47 | -0.74 | -0.616 | 0.455 | 0.379 | 0.547 | | | |
| 23-Jun | 552 | 17515.2 | -2.8 | 1.212 | -3.393 | 1.468 | 7.84 | | | |
| 24-Jun | 540.85 | 17832.03 | 2.3 | 2.29 | 5.267 | 5.244 | 5.29 | | | |
| 27-Jun | 544.05 | 18132.7 | 1.31 | 1.542 | 2.02 | 2.377 | 1.716 | | | |
| 28-Jun | 557.85 | 18493.59 | 0.92 | 0 | 0 | 0 | 0.846 | | | |
| 29-Jun | 566.95 | 18552.19 | 0.91 | -0.75 | 0 | 0.562 | 0.828 | | | |
| 30-Jun | 564 | 18743.1 | -0.64 | 0.55 | 0.04895 | 0.3025 | 0.409 | | | |
| 1-Jul | 562.5 | 18974.96 | 7.24 | -1.118 | -8.094 | 1.249924 | 52.4176 | | | |
| 4-Jul | 617 | 18896.24 | 3.41 | -0.432 | -1.473 | 0.186624 | 11.6281 | | | |
| 5-Jul | 626.5 | 18837.88 | 1.97 | -0.495 | -0.97515 | 0.24502 | 3.8809 | | | |

Values: $\beta=0.79$, $\alpha=0.0651$ and Coefficient Of Correlation=0.31066



3.1.2 Graph indicating the Average Return of the Stock and the Market

VENKYS:

Venkys has a beta of 0.79; Alpha of 0.21, Coefficient Of Correlation is 0.31066 on the two half month's returns during 5th May 2011 to 5th July 2011. A beta of 0.79 is less than the market return (it is assumed as 1) it is proved that this company has moderate volatility compared to the market return. Since the $\beta < 1$, then the security has below average risk. Means the variability in security returns would be less comparatively than market variability.

2. IFB Industries Limited

IFB Industries Limited originally known as Indian Fine Blanks Limited started their operations in India during 1974 in collaboration with Hienrich Schmid AG of Switzerland. The product range includes Fine Blanked components, tools and related machine tools like Straighteners, Decoilers, Strip loaders and others. A typical fine-blanking tool is a single-station compound tool for producing a finished part in one press stroke. The Engineering divisions are located at Kolkata & Bangalore. And the manufacturing division is in Goa. The Bangalore unit, apart from Fine Blanked components, manufactures motors for White goods as well as automotive applications. It manufactures around 10 auto components, both for two-wheelers and four-wheeler. Apart from manufacturing washing machine, it also imports and markets several home appliances under its brand name.

2.2 IFB Industries Limited

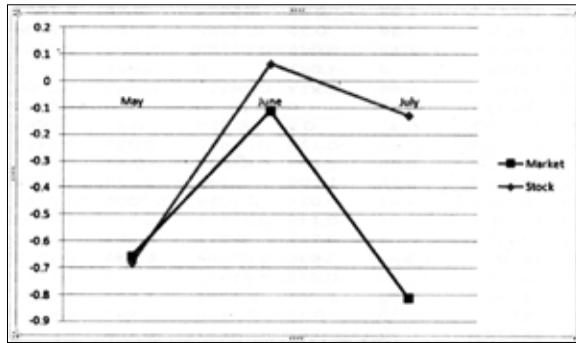
| IFB STOCK PR SENSEX PStock Ret Market Return | | | | | | | | | | |
|--|--------|---------|--------|--------|---------|---------|---------|--|--|--|
| Date | open | open | Y | X | X*Y | X^2 | Y^2 | | | |
| 5-May | 127.45 | 18484.7 | -2.86 | -0.014 | 0.04004 | 0.0001 | 8.1796 | | | |
| 6-May | 128.7 | 18289.8 | 0.98 | 1.25 | 1.225 | 1.562 | 0.9604 | | | |
| 9-May | 132.5 | 18628.6 | 2.95 | -0.53 | -1.5635 | 0.28 | 8.7025 | | | |
| 10-May | 136.95 | 18565 | 3.36 | -0.26 | -0.8736 | 0.067 | 11.2896 | | | |
| 11-May | 135.35 | 18572.6 | -1.17 | -0.066 | 0.07722 | 0.004 | 1.3689 | | | |
| 12-May | 133.5 | 18525.3 | 0 | -1.023 | 0 | 1.046 | 0 | | | |
| 13-May | 135.15 | 18362.5 | 0.48 | 0.919 | 0.44112 | 0.845 | 0.2304 | | | |
| 16-May | 135 | 18492.7 | -4.37 | 0 | 0 | 0 | 19.0969 | | | |
| 18-May | 132.05 | 18177.3 | 0.31 | -0.5 | -0.155 | 0.25 | 0.0961 | | | |
| 19-May | 133.95 | 18166.6 | -0.54 | -0.138 | 0.07452 | 0.019 | 0.2916 | | | |
| 20-May | 131 | 18200 | 0.89 | 0.693 | 0.61677 | 0.48 | 0.7921 | | | |
| 23-May | 131.9 | 18269.1 | -1.22 | -1.509 | 2.245 | 2.277 | 1.4884 | | | |
| 24-May | 129.25 | 18016.4 | 4.41 | -0.024 | -0.1058 | 0.0005 | 19.4481 | | | |
| 25-May | 134 | 17976.4 | -0.37 | -0.718 | 0.26573 | 0.515 | 0.1369 | | | |
| 26-May | 136.5 | 17917.1 | 1 | 0.711 | 0.711 | 0.505 | 1 | | | |
| 27-May | 137 | 18105.6 | 3.24 | 0.886 | 2.87064 | 0.784 | 10.4976 | | | |
| 30-May | 133 | 18319.7 | -16.43 | -0.478 | 7.85354 | 0.228 | 269.945 | | | |
| 31-May | 117.7 | 18266.6 | -2.99 | 1.295 | -3.8721 | 1.677 | 8.9401 | | | |
| 1-Jun | 113.95 | 18527.1 | 0.79 | 0.44 | 0.3476 | 0.193 | 0.6241 | | | |
| 2-Jun | 112.3 | 18425.9 | -1 | 0.37 | -0.37 | 0.136 | 1 | | | |
| 3-Jun | 113 | 18554.4 | -2.16 | -0.958 | 2.069 | 0.919 | 4.6656 | | | |
| 6-Jun | 113 | 18344.3 | 0 | 0.413 | 0 | 0.17 | 0 | | | |
| 7-Jun | 111.3 | 18355.3 | 0.9 | 0.764 | 0.6876 | 0.583 | 0.81 | | | |
| 8-Jun | 111.5 | 18448.4 | 1.47 | -0.293 | -0.4307 | 0.085 | 2.1609 | | | |
| 9-Jun | 112.25 | 18394.6 | 7.35 | -0.052 | -0.3859 | 0.002 | 54.0225 | | | |
| 10-Jun | 113 | 18390.4 | -1.48 | -0.662 | 0.979 | 0.439 | 2.19 | | | |
| 13-Jun | 120.7 | 18242.3 | -3.7 | 0.13 | -0.481 | 0.016 | 13.6689 | | | |
| 14-Jun | 116.35 | 18276.8 | 3.67 | 0.174 | 0.638 | 0.03 | 13.46 | | | |
| 15-Jun | 119 | 18298.6 | 2.5 | -0.909 | -2.272 | 0.826 | 6.25 | | | |
| 16-Jun | 121.1 | 18060.1 | -0.33 | -3.99 | 1.197 | 15.924 | 0.1089 | | | |
| 17-Jun | 122.6 | 18060.2 | -1.31 | -1.05 | 1.375 | 1.102 | 1.716 | | | |
| 20-Jun | 118 | 17925.2 | -4.46 | -2.33 | 10.391 | 5.428 | 19.891 | | | |
| 21-Jun | 114.75 | 17585.3 | -1.95 | -0.14 | 0.273 | 0.019 | 3.802 | | | |
| 22-Jun | 111.75 | 17659.5 | -2.96 | -0.616 | 1.823 | 0.379 | 8.761 | | | |
| 23-Jun | 109.55 | 17515.2 | 1.09 | 1.212 | 1.321 | 1.468 | 1.188 | | | |
| 24-Jun | 113.5 | 17832 | 1.62 | 2.29 | 3.709 | 5.244 | 2.624 | | | |
| 27-Jun | 114 | 18132.7 | -0.22 | 1.542 | -0.339 | 2.377 | 0.048 | | | |
| 28-Jun | 114 | 18493.6 | 1.33 | 0 | 0 | 0 | 1.768 | | | |
| 29-Jun | 114.5 | 18552.2 | 1.58 | -0.75 | -1.185 | 0.562 | 2.496 | | | |
| 30-Jun | 119.85 | 18741.1 | -1.34 | 0.55 | -0.737 | 0.3025 | 1.795 | | | |
| 1-Jul | 117 | 18975 | 2.53 | -1.118 | -2.828 | 1.24992 | 6.4009 | | | |
| 4-Jul | 119 | 18896.2 | -1.45 | -0.432 | 0.626 | 0.18662 | 2.102 | | | |
| 5-Jul | 115.5 | 18837.9 | -1.47 | -0.495 | 0.727 | 0.24502 | 2.16 | | | |

Values: $\beta=0.535$; $\alpha=-0.196$ and Coefficient Of Correlation is 0.163

1.1.1 Average Return of the stock(IFB Industries Ltd) and the Market

| IFB | Stock | Market |
|------|--------|--------|
| May | -0.685 | 0.027 |
| June | 0.0631 | -0.175 |
| July | -0.13 | -0.681 |

3.2.2 Graph indicating the Average Return of the Stock and the Market

**IFB:**

IFB has a beta of 0.535, Alpha =0.465; Coefficient Of Correlation is 0.163 on the two half month's returns during 5th May2011 to 5th July2011. A beta of 0.79 is less than the market return (it is assumed as 1) it is proved that this company has moderate volatility compared to the market return Since the $\beta < 1$, then the security has below average risk. Means the variability in security returns would be less comparatively than market variability.

Findings

The summary of the recommended stock are as follows:

VENKYS:

Venkys has a beta of 0.79; Alpha of 0.21, Coefficient Of Correlation is 0.31066 on the two half month's returns during 5th May2011 to 5th July2011. A beta of 0.79 is less than the market return (it is assumed as 1) it is proved that this company has moderate volatility compared to the market return

IFB:

IFB has a beta of 0.535, Alpha =0.465; Coefficient Of Correlation is 0.163 on the two half month's returns during 5th May2011 to 5th July2011. A beta of 0.79 is less than the market return (it is assumed as 1) it is proved that this company has moderate volatility compared to the market return.

Recommendations

The levels of fluctuations in these segments have an influ-

ence on the other segments too. What causes high or less volatility in the Indian context remains largely unanswered question. The influence of macroeconomic, industry and company-specific factors on the volatility of stocks has to be analyzed.

The influence of market structure on the volatility also has to be analyzed. The frequency and medium of information dissemination is also believed to have significant influence on the volatility of the stocks and hence the problems related generation, process and dissemination of information as also to be considered.

Conclusion

There are number of factors which have an influence on the price movements. The volatility is depends on the internal and external factors. Some of them are controllable and others are non controllable.

In the year 1978, the base year, the sensex was 100 and now it's more than 18,000 .Its shows that the volatility is very high and the study also shows that most of the companies are less volatile with the sensex movement and hence an investor can invest in the stocks recommended by the company Alpha Invesco Research Pvt Ltd,

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