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A Comparative Analysis of Bse and Nse With Special Refrence To Risk And Returns

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ABSTRACT: In every part of life while making decisions, risk and return analysis play a crucial role. In that, Stock Exchange is a market where various securities are traded, for example, Equity shares, mutual funds, debentures, bonds insurance products, common assets and so on, generally the current securities are traded in this market. Indian Financial sector plays a vital in in the country economy development and engages a major share in the stock trading scenario. Risk and Returns are two sides of a same coin, where both the aspects influence each other for an investment. Consequently, understanding the risk associated with the venture assists with maximizing returns. This present study is to examine the Risk and return analysis of the Sensex Banking stocks of BSE & NSE. The health of the economy is reflected by the development of stock market. To light with this research paper is a comparative study of Bombay Stock Exchange and the National Stock Exchange during the period from 2010 to 2021. And the fluctuations in share prices of these companies for 12 long years. This research paper helps the investors to examine and compare the assessments along with the market and to find out that out of these two stock exchanges which one is performing better financially on various basis and to identify the company which would be preferable to invest based on their risk-taking ability.

Keywords: Stock Exchange, BSE, NSE, Indian Financial Sector

I. INTRODUCTION

Stock Markets have a significant impact and it turn as an indicator reflecting the performance of the country's monetary condition. The securities exchange alludes to the assortment of business sectors and trades where ordinary exercises of purchasing, selling and issuance of portions of freely held organizations occur. The greater part of the exchanging the Indian financial exchange happens on its two stock trades: The Bombay Stock Exchange (BSE) and the National Stock Exchange (NSE). The essential market is the place where organizations glide offers to the overall population in an Initial Public Offering (IPO) to raise capital.

When new securities have been sold in the essential market, they are exchanged secondary market, where one investor purchases shares from another investor at the overarching market cost or at whatever costs both the purchaser and dealer concur upon. The optional market or the stock trades are managed by the administrative power. In India, the optional and essential business sectors are represented by the Security and Exchange Board of India (SEBI).

Prior in Mid 1990s the standard region hypothesis was bank interest, gold, property and such various sorts of broad assets. Presently Indian monetary area is the foundation of the country economy advancement, the financial area places a vital job in strengthening, all things considered. The Banking sector connects with significant divide between different areas in Indian stock exchanging situation. In the capital market equity market is playing monetary advancement of country yet banking area, equity market has unpredictability and less profits from interest in a portion of the banks and a portion of the banks have greater instability and capital misfortune in venture too. The purchasers and merchants exchange on various monetary securities in the financial exchange which experience to achieve their monetary destinations from their ventures.

This present research paper is to analyse the performance of the Banking Stocks of Bombay Stock Exchange (BSE) and National Stock Exchange (NSE) for a period of 12 years from January 1st, 2010 to January 31st, 2021. By examining the risk & returns of year closing share prices of the stocks, this study would help the investors to compare and analyse and can make decisions of where to invest in which will be more

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beneficial with regards to their risk-taking ability. Along these lines, the financial backers need to process the beta and correlation coefficient to know the current state of the stock its connection with the market record and do the stocks are able to produce returns for their ventures.The significance of Risk return relationship is advocate from both of the investors and firms. Assess the connection between Expected pace of return and the risk of resource would assist the investors with settling on upgraded and more exact choice on putting resources into various enterprises. The investors have to distinguish the base risk and greatest profit from investment decisions through portfolio analysis.

II. LITERATURE REVIEW

Nitin Sethi & Sonia Gupta (2012) conducted the study with the objective of to measure the nature of correlation of nifty and Sensex. This research paper was an attempt to consider the moving trend of Nifty and Sensex are correlated or not. The research design of the paper was casual in nature. For 24 months the data was collected and monitored by the researcher. Data was collected from different journals, magazines, and websites. Thus, the data analysis proved that there was positive correlation between Nifty and Sensex.

Dr. Krishnaprabha and Vijayakumar (2015) talks about a study on Risk and Return Analysis of Selected stocks in India. He found that the Risk and Return analysis plays a key role in most individual decision-making process. Based on the topic he used Banking and Automobile sectors for calculating the Risk and return analysis of the Daily basis. He also states that Alpha stock is positive and the companies are independent to market return and have a profitable return.

Dr. S Poornima and Swathiga (2017), examined by selected stocks with the relationship between risk and returns. These companies are selected from 2 different sectors i.e., automobile and IT sector, which are listed on NSE. The tools like average return, SD, and CAPM model are used to perform the analysis. the comparative analysis played a vital role in this research. Analysis is done for a period of 3 years. They concluded that the analysis helps the investors to select based on their own choice. And automobile sector had better market than the IT sector.

III. OBJECTIVES OF THE STUDY

The objectives of this research paper are to capture the risk and return analysis of sample Banking Stock invested in Bombay Stock Exchange (BSE) and National Stock Exchange (NSE). The aim is to help the investors understand the risk return trade off of banking stock at Bombay stock exchange and National Stock Exchange.

Primary Objective

- To examine the relationship between risk & returns of Sensex Banking stocks.

Secondary Objective

- To study the risk involved in the securities of the selected companies.
- To analyse the constancy of Beta for the Banking stocks of BSE & NSE Sensex with respect to Sensex.
- To identify the best investment of the banking Equities on selected banks.

RESEARCH METHODOLOGY

Research Methodology refers to the plan which examines the methods, tools, and techniques and the procedures being used for the purpose of collecting and analysing the data. In this present paper different Bombay stock exchange (BSE) and National Stock Exchange (NSE) Sensex and banking stocks have been utilised to determine the risk return trade off. These analyses give clear idea about the selection of bank equity for investment list in stock market.

NEED FOR THE STUDY

This research paper was represented to analyse the comparative study of Bombay Stock Exchange and National stock exchange with special reference to risk and returns. This analysis the fluctuations of risk and returns of the Sensex Banking stocks. It also identifies the performance of the banking stocks in the share market with the share prices of each security. This is based on the efficiency of stock market that has direct consequences for the action of investors in the market for profitable benefits. The financial service sectors should provide proper information to the investors for understanding the banking stocks to invest their money in a profitable investment decision with the latest current scenario of the stock market.

SAMPLING SELECTION

The present research paper is tested the performance of Banking stocks listed in both Bombay Stock Exchange (BSE) and National Stock Exchange (NSE). Turnover values of indices were wanted to decide the sample size for this study. For the analysis of stocks in the securities market are taken for 8 banking stocks. Out of which 4 from Bombay stock exchange (BSE) and another 4 from National stock exchange (NSE). Based on the turnover values, the top leading companies which has growth in market standards, where selected taken for analysis purpose. The 8 banks which are considered for this research paper are:

- Axis Bank Ltd
- City Union Bank Ltd
- ICICI Bank Ltd
- Yes Bank Ltd
- IndusInd Bank Ltd
- State Bank of India Ltd
- HDFC Bank Ltd
- Kotak Mahindra Bank Ltd

SOURCE OF DATA

The study is purely based on secondary data i.e., year closing values of both Stock returns and the returns value of Bombay stock exchange (BSE) and National stock exchange (NSE) were used. Based on the descriptive analysis, the details regarding sample returns value were collected from www.moneycontrol.com. Other than that, all other related data or information were collected from various books, websites, and journals.

PERIOD OF THE STUDY

This research paper is an attempt to compare the relative difference between Bombay stock exchange (BSE) and National stock exchange (NSE) by analysing the share price returns of Banking stocks from the Indian stock market. The Data is collected for a period of 12 years of the 8 selected stocks of the Financial services sector listed in BSE and NSE for the purpose of calculating the risk and returns during the period from January 2010 to January 2021.

LIMITATIONS OF THE STUDY

- The research study is limited to data collected for a period of 12 years i.e. from January 2010 to January 2021. (for the purpose of calculating beta, standard deviation, correlation and covariance).
- The study is limited to data collected from eight companies listed under Financial Services of Bombay stock exchange (BSE) and National stock exchange (NSE)
- The prediction of the risk cannot be accurate since the fluctuations in the market is based on other External factors and it is uncertain.

TOOLS USED FOR ANALYSIS
TOTAL RETURNS

Any rational financial backer, prior to putting their investible abundance in the stock, investigations the risk related with the specific stock. The genuine return he gets from a stock may differ from his normal return and the danger is communicated as far as changeability of return.
Expression for calculating the rate of return earned on any asset over time period is,

$$\boxed{R = \frac{p_1 - p_0}{P_0}}$$

R = expected rate of return during time period
P1 = Closing price
P0 = Opening price

MEAN

Mean is the normal estimation of the arrangement, gotten by including the arrangement and partitioning by the quantity of perceptions. It is the most well-known proportion of focal inclination.

Average returns or Mean ($\bar{x}$)= $\frac{\sum x_i}{n}$ (or) R/N

RISK MEASUREMENT

Investment is a proportion of the risk emerging from openness to general market developments.The interaction includes recognizing and breaking down the measure of risk associated with a venture, and either accepting that risk or relieving it.

STANDARD DEVIATION

The standard deviation is regularly utilized by Investors to gauge the risk of a stock or a stock portfolio. The essential thought is that the standard deviation is a proportion of unpredictability: the more a stock's profits differ from the stock's average return, the more unstable the stock.

$$\text{Standard deviation} = \sqrt{var\,iance}$$

$$\text{Variance} = 1/n\text{-}1(\textstyle\sum d^2)$$

BETA INTERPRETATION

The beta (β) of a investment security (for example a stock) is an estimation of its unpredictability of profits comparative with the whole market. An organization with a higher beta has more serious danger and furthermore more prominent anticipated returns.

$$\boxed{\beta = \frac{cov(r_i, r_m)}{VAR(r_m)}}$$

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CORRELATION COEFFICIENT

The correlation coefficient is a proportion of the relationship between two factors. It is utilized to discover the relationship is among information and an action to check how solid it is. The equations return a worth between - 1 and 1,

$$R = \frac{n(\Sigma xy) - (\sum x)(\sum y)}{\sqrt{(n\Sigma x^2 (\Sigma x)^2)(n\sum y^2 - (\Sigma y)^2)}}$$

COVARIANCE COEFFICIENT

The covariance coefficient is a proportion of the connection between two arbitrary Variables. The measurement assesses how a lot - how much the factors change together. The units are processed by duplicating the units of the two factors. The change can take any certain or negative qualities. The qualities are examined as follows:

Positive covariance: This expresses that two factors will in general move a similar way.

Negative Covariance: Reveals about the two factors will in general move in opposite headings.

DATA ANALYSIS AND INTERPRETATION

In each part of life, Risk and return relationship isn't just for monetary investigation, yet in addition for central ideas. The prerequisite that normal return is proportionate with risk is known as the "risk-return trade off" in finance. The following are the examination of Risk and Returns of the Banking stocks from Bombay Stock Exchange (BSE) and National Stock trade (NSE).Showing the Risk and Return variations of Banking Stocks

Showing the Risk and Return variations of Banking Stocks Listed in BSE &NSE

Company	Total Returns	Mean	Standard Deviation	Beta
BSE				
Axis Bank LTD	1.838	0.153	0.367	1.947
City Union Bank LTD	3.027	0.252	0.38	1.54
ICICI Bank LTD	1.793	0.149	0.333	1.92
Yes Bank LTD	0.714	0.06	0.581	1.679
NSE				
IndusInd Bank LTD	0.714	0.06	0.581	1.115
HDFC Bank LTD	2.484	0.207	0.227	0.528
State Bank of India LTD	0.746	0.062	0.337	1.02
Kotak Mahindra Bank LTD	2.566	0.214	0.247	0.647

Interpretation

It has observed from the above table during the study period, from Jan 2010 to Jan 2021, all the Stocks showed positive average daily returns. The above table clearly indicates that City Union Bank of Bombay Stock Exchange (BSE) and Kotak Mahindra Bank of National Stock Exchange (NSE) were top performers which have higher returns, when compared to all other companies but City Union Bank have relatively high beta as well, which shows the company was involved with high risks which in turn gave good returns and Kotak Mahindra which has low risk level and it is preferable to invest and the company's stock is volatile because it has a beta of 1.54 and 0.647. HDFC Bank of NSE would be the Second option for an investor who wants lower risk with good returns, has comparatively less volatility. Axis Bank of BSE have positive returns as well as high beta level of 1.92, so the investor should be careful while investing in this security. The HDFC bank and Kotak Mahindra Bank has Beta value within the value 1, and also provides positive returns. While the Lowest returns would be Yes Bank and IndusInd Bank in BSE and NSE with high levels of Risk involved with 1.679 and 1.115 of beta level, so it is not preferable for an investor to choose these companies as the investment would definitely

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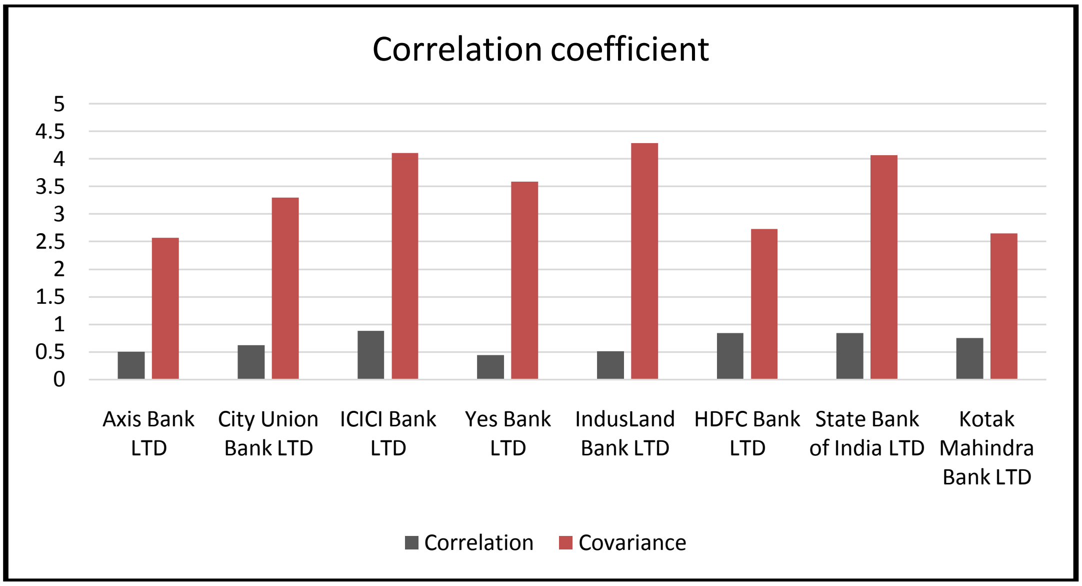
give them low returns and they are highly volatile stocks.

Graph 1 representing total returns of the banking stocks

Showing the correlation and covariance of the selected eight Banking stocks Listed in BSE & NSE

Company	Correlation	Covariance
Axis Bank LTD	0.81	0.042
City Union Bank LTD	0.62	0.033
ICICI Bank LTD	0.881	0.041
Yes Bank LTD	0.441	0.036
IndusInd Bank LTD	0.301	0.025
HDFC Bank LTD	0.365	0.012
State Bank of India LTD	0.48	0.02
Kotak Mahindra Bank LTD	0.41	0.015



Graph 2, representing correlation and covariance of the banking stocks

Interpretation:

The correlation and the covariance of these companies are calculated in comparison with the market returns. ICICI Bank returns had a very strong correlation with the BSE Returns with a covariance of 0.041. HDFC Bank and State Bank of India had a very strong correlation with the National Stock Exchange (NSE) returns with a covariance of 0.012 & 0.02. Out of these banks, all other banks had moderately high correlation with the market returns.

IV. FINDINGS

Based on the Objectives, the following were found in this research paper:

- Here we have taken 8 Banking stocks out of which 4 from BSE and another 4 from NSE to calculate the risk and returns for the period of Jan 2010 to Jan 2021.
- Beta describes the relationship between the stock returns and the index returns. From the Betas of banks, it is found that all the banks have a positive beta values according to which the stock values move as per the movement of the market index.
- Out of BSE Stock returns City Union Bank earned the highest returns of 25% Followed by the other banks in BSE Axis 15% ICICI 14% and YES bank 5%. Out of NSE Stock returns Kotak Mahindra earned more with returns of 20% and all other banks in NSE with HDFC 21% SBI 6% IndusInd 5%.
- City Union Bank had a high beta level i.e. 1.541, but the company was earning very good returns. So, if an investor is ready to take high risk levels to get good returns, it is preferable to invest in City Union Bank.
- Kotak Mahindra Bank has higher returns with moderately low beta value, which is within the value 1, so this would be considered as the best performer to invest with lower risk compared to all other Banking stocks.
- Many companies like YES, SBI, ICICI, and IndusInd had high levels of beta in the study period which is more volatile in nature, but the returns were low, and for ICICI it turned out to be moderately positive returns but with higher risk involved.
- Historical data of both the market is measurable of the banking stocks because both BSE & NSE has same functioning with the little difference in price in both the market. There are many companies which are listed in both the markets so similar type of fluctuations can be seen.
- Both the market has shown great results in recent times. As BSE has higher number of returns than that of NSE it can be visible that the fluctuation in BSE is more than NSE.

V. SUGGESTIONS

1.As the average returns of the Banking stocks, City union, Kotak Mahindra and HDFC were high, the investors who are willing to earn more returns, can invest in these stocks.

2.The banking stocks IndusInd, SBI and Yes Bank are risky in investing because of high volatility, it is suggested that the investors should be careful while investing in these securities as they are having low returns.

3.The comparison between the risk and returns of the selected stocks in BSE and NSE, reveals that BSE recorded the highest return as well as the second highest risk. It is suggested for the investors while making an investment decision to invest in BSE.
4.According to the analysis both BSE and NSE Stocks were not weak form efficient during the study period. It is required to know the complete knowledge of investments before investing in securities.
5.If the Investor wants to invest in the stocks with lower risks and positive returns, he is suggested to invest in those securities whose Beta is moderately low.
6.Try not to place your whole interest in one security. It resembles "placing all the money tied up on one place". This will make risky in the long term investment decisions.

VI. CONCLUSIONS

Therefore, after by studying and comparing both the Bombay stock exchange and National Stock exchange, we can conclude that both BSE and NSE are the pillars of Indian Stock Market. As a whole stock market is sometimes highly volatile and has lot of fluctuations. It depends upon the investors how he can make use of this to get the money which he has put in the market. Risk and returns analysis are very essential, because it helps to calculate future predictable returns and risk of the stock. From this study, during the period Jan 2010 to Jan 2021 with the selected stocks it is clear that investment in City union bank, Kotak Mahindra and HDFC has higher returns with moderately high risk also. While compared to other banks have high risk with low returns in variations. An investor should be in a position to analyse the various investment options available to him and thus minimize the risk and maximize the returns.

Beta is useful to tool for comparing the relative systematic risk of different stocks, as such the risk is directly correlated with return. It is normally understood that when there is high risk, the reward will be more, but seeking excessive risk does not ensure excessive return. At a given level, each Investment has a degree of risk. It is therefore important for an investor to analyse the continuous volatility of bank stock while constructing a profitable portfolio.

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