A Study on Risk and Return Analysis of Selected Banking Securities

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Abstract— In each country the banking system plays a prominent role in the development of its economy, and Indian banking sector is not exceptional. Indian financial sector is the backbone of the country's economy development, the banking sector plays a key role in empowerment of all areas. In the capital market, the equity market plays a huge role. And it's volatile in nature too.
Banking sector equity market has volatility and less returns on investment in some of the banks and some of the banks have more volatility in investment also. The investors identify the minimum risk and maximum return on investment decisions through portfolio analysis. Hence, understanding the risk involved in the investment helps to maximize returns. This study helps investors to understand from the Previous Behaviour Of Selected data., to make the best decision through market volatility, the primary objective of this study is to analyse the risk and return of selected banking securities.

***Keywords*—** Risk, Return, Banking industries

I. INTRODUCTION

Banking sector in India has shown tremendous growth in recent past years. Total banking assets in India is expected to cross US$ 28.5 trillion in 2025. This is due to the government efforts to bring access to the banking system by promoting banking-technology and expansion of banking facilities in the UN banked and metropolitan regions. Moreover, India's banking sector has remained stable during the global meltdown, thereby retaining public confidence over the years.
But the bank stock is considered as one of the most sensitive avenues of investment in Indian stock market. Only through an intelligent investment decision it is possible for an investor to obtain a fair return from a sensitive sector like banking. The risk/return relationship is a fundamental concept in not only financial analysis, but in every aspect of life. If decisions are to lead to benefit maximization, it is necessary that individuals/institutions consider the combined influence on expected (future) return or benefit as well as on risk

Return expresses the amount which an investor actually earned on an investment during a certain period. Return includes the interest, dividend and capital gains; while risk represents the uncertainty associated with a particular task.
In financial terms, risk is the chance or probability that a certain investment may or may not deliver the actual/expected returns.
The study makes an attempt to conduct a risk & return analysis of selected banking securities.

II. REVIEW OF LITERATURE

1. Sushma KS, Charithra CM, DR. Bhavya Vikas 2019 has conducted study on
A Study on risk and return analysis of selected financial services companies listed on NSE
This study helps the investors to examine and compare the assessments along with the market and to identify the company which would be preferable to invest based on their risk-taking ability. The primary objective of the study was to assess the risk and return of the eight NSE listed financial services companies along with a secondary objective to compare individual company stock volatility before and after the event of demonetization. The tools and techniques used for analysis were Mean, Standard deviation, Beta, Correlation, Covariance and T-test. Analysis was done by using the closing prices of each month for all the selected companies (Bajaj Finserv, HDFC, ICICI, Axis, Cholamandalam investment and finance, State bank of India, Mahindra & Mahindra, Max finance services) for a specified time period. The findings of the study were that Bajaj Finserv had the highest returns amongst the selected eight companies and the volatility of all the selected eight companies had no difference before and after the event of demonetization. The overall study suggested that investors should always be ready to face any unforeseen events. To be on a safer side and to minimize the severity of loss during such events, various preventive measures like assessing the risk and return should be done well in advance.
2. DR. E. Rajesh (2019) conducted study on NSE Nifty banks stocks: Risk and Return analysis,
The Specific objective of the study was
1. to study the banks' stock movement with respect to Nifty 50 index;
2. to know the average returns and risk of each selected stock.

This study covers the period from 1st January 2018 to 31st December 2018. The data has been tested by different statistical tools namely: Mean, Standard deviation, Beta and Correlation. The findings of the study exposed that the average of daily returns for the NSE NIFTY 50 Index for the period was positive. However, the average returns of the selected banks' stocks show negatively except ICICI BANK.

3. Suresh and Sai Prakash (2018) have conducted a study on "Comparison of risk-return analysis of public and private sector banks listed on bank nifty". The objectives of the study are to identify the return and risk of public and private banks listed on bank nifty, to rank the stocks on the basis of returns, to compare the performance of each stock against their benchmark index and to measure the portfolio return and risk of public and private banks listed on bank nifty. The study has covered a period of 12 months i.e., starting from 1st January 2016 till 31st December 2016.They have selected 12 stocks listed on bank nifty in NSE. The study is based on secondary data. The data have been collected from NSE website, newspaper, journals, books, reports by researchers and scholars. The study is based on the analysis of stocks listed on bank nifty. They have concluded that the study is an attempt to evaluate the returns of banking stocks listed on bank nifty and identify the best stocks to invest and the worst stocks to be ignored.

4. Gautami and Nalla Bala Kalyan (2018) have conducted the study on "A comparative study on risk and return analysis of selected stocks in India" The study has focused on the objective: 1. To study the fluctuation in share prices of selected companies 2. To study the risk involved in the securities of selected companies 3. To make comparative study of Risk and Return of Bharati Airtel, Dabur India Panyam, Asian Paint. The data has been collected from the sources, such as present and historical data and also from Indian bull and internet. The tools used here are average return, standard deviation. The samples are taken from Bharati Airtel, Dabur India Panyam and Asian Paints. They have concluded that the study helped the investor to define the trends to some extent.

5. Nirmala and Devendran (2017) have conducted a study on "The Risk and Return Analysis of Equity shares with special reference to select Mutual Fund companies" The study has focused on the objectives: 1. To study the Capital Asset Pricing model (CAPM) 2. To measure the risk and return on select mutual fund companies listed in NSE by using CAPM 3. To analyse the performance of stock of select companies by using Jenson's Alpha. The samples were randomly selected from NSE's 500 index from April 2011 to March 2016. The risk and return analysis were done by using Capital Asset Pricing Model and Performance analysis was done by using Jenson's Alpha. It has been concluded from the Study that the investors chose SBI and ICICI to invest their funds because their cost of capital and risk is less and they are performing too well.

III. RESEARCH METHODOLOGY

NEED FOR THE STUDY:

Banking sector plays a vital role in the development of the economy, investing in banking securities is very common among investors, but the banking sector securities tend to be volatile in nature**,** so If the Market value of the banking securities drops, the asset shrinks. In this present situation, risk analysis of select banking securities in India is felt highly relevant. Proper analysis of risk and return is very important to become an efficient investor. Hence, the study aims to conduct risk and return analysis of select banking securities .

SCOPE OF THE STUDY:

This research on banking securities analysis of Indian stock market with reference to BSE, provides information to the investor to identify the best investment of banking securities. In this present situation, risk analysis of select banking securities in India is felt highly relevant. Proper analysis of risk and return is very important to become an efficient investor. Hence, the study aims to conduct risk and return analysis of select banking securities in Bombay Stock Exchange (BSE).

OBJECTIVE OF THE STUDY

1. To analyse the risk of selected banking securities
2. To analyse the return of selected banking securities
3. To examine the relationship between the Sensex and Securities .Return.
4. To identify the best Investment from Selected banking securities.

RESEARCH DESIGN:

The study is based on secondary data. The data have been collected from secondary sources such as websites like Investopedia, BSE and Moneycontrol.com, Journals, newspapers, books, etc., The collection of share prices of select companies for a period of Seven years. The study of Risk-Return analysis for a period of Seven years (2014-2020).

DATA COLLECTION:

The sample of stocks for collecting secondary data has been selected based on random sampling for a period of seven years from 2014-2020.

SAMPLE SIZE:

To analyse the risk and return analysis seven banks are chosen

SEVEN BANKS:

1.Axis Bank
2.ICICI Bank
3.Kotak Bank
4.HDFC Bank
5.Indusind Bank
6.City Union Bank
7.Federal Bank

STATISTICAL TOOLS USED FOR ANALYSIS

1. Return = (closing Price-Opening Price)/ (opening Price) *100
2. Average return= (Total Return/ N)
3. Standard Deviation (Risk)
4.Variance
5. Deviations
6. CORRELATION= COV/SDMI*SDSS
*SDMP= Standard Deviation of Market Indicator
*SDSP= Standard Deviation of Specific Stock
7. Beta= Covariance of stock /variance of sensex

IV. DATA ANALYSIS AND INTERPRETATION

HYPOTHESIS STUDY

H0 = There is no relationship between market returns and banking sector returns.
H1 = There is relationship between market returns and banking sector returns

RISK AND RETURN OF AXIS BANK IN COMPARISON WITH SENSEX

PARTICULARS	AXIS BANK	SENSEX
MEAN	3.4	4.4
STANDARAD DEVIATION	10.7	8.1
CO VARIANCE	82.9	
VARIANCE	114.9	66.0
CORRELATION	0.95213	
BETA	1.3	1.0

The AXIS Bank has less returns when compared with the market returns. The AXIS Bank has 3.4and BSE Sensex has 4.4 . The AXIS Bank has the higher risk with 10.7 when compared to the market returns. The AXIS Bank has the higher systematic risk with 1.3 . when comes to the correlation the AXIS Bank is related to the BSE Sensex with 0.95

RISK AND RETURN OF ICICI BANK IN COMPARISON WITH SENSEX

PARTICULARS	ICICI BANK	SENSEX
MEAN	4.5	4.4
STANDARAD DEVIATION	7.97	8
CO VARIANCE	56.70	
VARIANCE	63.6	65.96
CORRELATION	0.8893	
BETA	1	1

The ICICI Bank has Similar returns when compared with the market returns. The ICICI Bank has 4.5 and BSE Sensex has 4.4 . The ICICI Bank has similar risk with 7.97 when compared to the market returns. The ICICI Bank has the systematic risk with 1. when comes to the correlation the ICICI Bank is related to the BSE Sensex with 0.8893

RISK AND RETURN OF KOTAK BANK IN COMPARISON WITH SENSEX

PARTICULARS	KOTAK BANK	SENSEX
MEAN	6.7	4.4
STANDARAD DEVIATION	5.39	8
CO VARIANCE	40.16	
VARIANCE	29.1	65.96
CORRELATION	0.931431664	
BETA	0.6	1

The KOTAK Bank has higher returns when compared with the market returns. The KOTAK Bank has 6.7 and BSE Sensex has 4.4. The KOTAK Bank has least risk with 5.39 when compared to the market returns. The

KOTAK Bank has the less systematic risk with 0.6 . When it comes to correlation The KOTAK Bank is related to the BSE Sensex with 0.931431

RISK AND RETURN OF HDFC BANK IN COMPARISON WITH SENSEX

PARTICULARS	HDFC	SENSEX
MEAN	5.563489349	4.419793398
STANDARAD DEVIATION	6.633967426	8.121458935
CO VARIANCE	51.27833333	
VARIANCE	44.00952381	65.95833333
CORRELATION	0.951757951	
BETA	0.8	1

The HDFC Bank has higher returns when compared with the market returns. The HDFC Bank has 5.56 and BSE Sensex has 4.4 . The HDFC Bank has less risk with 6.63 when compared to the market returns. The HDFC Bank has the least systematic risk with 0.8 . When comes to the correlation the HDFC Bank is related to the BSE Sensex with 0.95175

RISK AND RETURN OF INDUSIND BANK IN COMPARISON WITH SENSEX

PARTICULARS	INDUSIND	SENSEX
MEAN	5.7	4.419793398
STANDARAD DEVIATION	15.5	8.121458935
CO VARIANCE	114.0866667	
VARIANCE	240.7347619	65.95833333
CORRELATION	0.906294074	
BETA	1.729677827	1

The INDUSIND Bank has higher returns when compared with the market returns. The INDUSIND Bank has 5.7 and BSE Sensex has 4.4 . The INDUSIND Bank has Higher risk with 15.5 when compared to the market returns. The INDUSIND Bank has the high systematic risk with 1.7 . When comes to the correlation The INDUSIND Bank is related to the BSE Sensex with 0.90629

RISK AND RETURN OF CITY UNION BANK IN COMPARISON WITH SENSEX

PARTICULARS	CUB	SENSEX
MEAN	4.4	4.419793398
STANDARAD DEVIATION	7.87	8.121458935
CO VARIANCE	51.65	
VARIANCE	62.0447619	65.95833333
CORRELATION	0.808093365	
BETA	0.8	1

The CITY UNION Bank has the same returns when compared with the market returns. The CITY UNION Bank has 4.4 and BSE Sensex has 4.4 . The Bank has less risk with 7.87 when compared to the market returns. The CITY UNION Bank has the systematic risk with 0.8 . When comes to the correlation the CITY UNION Bank is related to the BSE Sensex with 0.8080

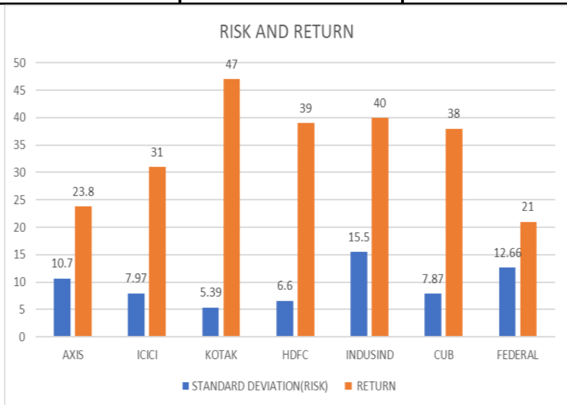
RISK AND RETURN OF FEDERAL BANK IN COMPARISON WITH SENSEX

PARTICULARS	FEDERAL	SENSEX
MEAN	3	4.419793398
STANDARAD DEVIATION	12.66	8.121458935
CO VARIANCE	91.8	
VARIANCE	160.382381	65.95833333
CORRELATION	0.89284264	
BETA	1.4	1

The FEDERAL Bank has less returns when compared with the market returns. The FEDERAL bank has 3 and BSE Sensex has 4.4 . the FEDERAL Bank has higher risk with 12.66 when compared to the market returns. The FEDERAL Bank has the systematic risk with 1.4 . when comes to the correlation the FEDERAL Bank is related to the BSE Sensex with 0.8928

RISK AND RETURN ANALYSIS

BANK	STANDARD DEVIATION(RISK)	RETURN
AXIS	10.7	23.8
ICICI	7.97	31
KOTAK	5.39	47
HDFC	6.6	39
INDUSIND	15.5	40
CUB	7.87	38
FEDERAL	12.66	21



From the above table and the chart depicts the Risk and Return of selected banking securities. From the above table, it is noticed that Kotak Bank has the highest return , It is also observed that IndusInd Bank has the highest risk, so the investors must consider the risk factor before investing in IndusInd Bank . The investor must invest in banking securities which have maximum return and minimum risk. It can be suggested that the investor can invest in Kotak and HDFC Bank .

BETA VALUES

Beta is considered as the main measurement statistic of systematic risk. Beta is the stock's sensitivity to the market index movement. In simple words Beta shows how a stock's return changes with respect to movement in the stock index. Beta measures the stock risks in relation to the overall market.

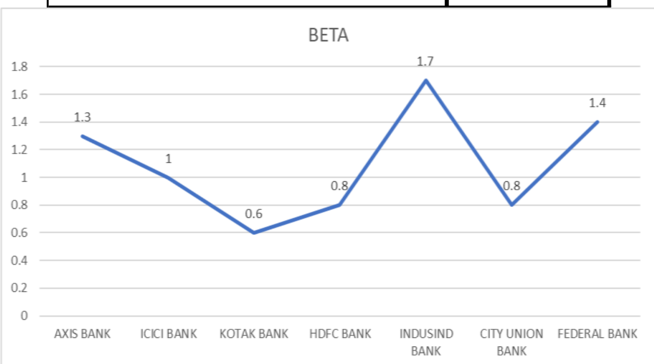
• If Beta = 1: If Beta of the stock is one, then it has the same level of risk as the stock market. Hence, if the stock market rises up by 1 per cent, the stock price will also move up by 1 per cent. If the stock market moves down by 1 per cent, the stock price will also move down by 1 per cent

. • If Beta > 1: If the Beta of the stock is greater than one, then it implies a higher level of risk and volatility as compared to the stock market. Though the direction of the stock price change will be the same, however, the stock price movements will be rather extreme.

• If Beta >0 and Beta<1 : If the Beta of the stock is less than one and greater than zero, it implies the stock prices will move with the overall market, however, the stock prices will remain less risky and volatile.

BETA VALUES OF SELECTED BANKING SECURITIES

AXIS BANK	1.3
ICICI BANK	1
KOTAK BANK	0.6
HDFC BANK	0.8
INDUSIND BANK	1.7
CITY UNION BANK	0.8
FEDERAL BANK	1.4



The above table depicts the Beta values of the selected banking securities. Beta is calculated to show the movement of share price with the market. If the value of beta is positive, the share price moves in the direction of the movement of the market. If the value of beta is negative, then the share price moves opposite in the direction of the movement of the market. If the value of beta is more than 1, the volatility of the bank is high and if the value of beta is less than 1, then the volatility of the bank is low. From the table, it is observed that the volatility of 3 banks is high and 3banks are low, and 1 bank stock moves identically to the market.

V. FINDINGS AND SUGGESTIONS

FINDINGS

- Among 7 banks Kotak Bank has experienced higher returns.
- The IndusInd Bank has higher risk compared with all
- Kotak Bank has the lower risk compared with all

SUGGESTIONS

- The investors can invest in Kotak bank and HDFC bank securities, which would be feasible because they have a good return compared to other banking securities taken for the study.
- Investors should hold securities which give high returns with less risk, in this study Kotak Bank falls under this category
- Investors should give importance to fundamental analysis and not rely on technical analysis before investing in securities.
- Holding two or more securities will reduce the unsystematic risk.
- 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 less than +1.00. Stocks having a Beta of less than +1.00 would be considered as more conservative investments.

V. CONCLUSION

In this study we conclude that some of the banks have higher returns and some banks have high risk. The investor always needs to find a combination of higher return with low risk. The Beta is useful to judge Systematic Risk . Thus, this study helps the investor to arrive at a conclusion and also provide information about the performance of various banking securities in the market in terms of return and risk. Overall Kotak Bank is a good Investment for investors from the bank taken for the study as it has given higher return, with less risk and less beta value so it’s considered to be a good investment for investors.

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