

RISK AND RETURN ANALYSIS OF SELECTED BANKING STOCKS IN INDIA

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ABSTRACT

India's banking sector was well regulated and amply capitalised. The economic and financial environments in India are extensively superior among any other country in the world. Credit, market and liquidity risk survey suggest that Indian banks are generally strong and have endured the global downturn well. Risk and return are highly correlated in investing money in the securities. Expectations of high and increased returns can be generated with high risk securities. Return indicates the gains and losses occurred from trading a security. In this paper an attempt is made to analyse the risk and risk and return of the top six selected bank stocks that constituents by weightage in the NIFTY bank Index.

Keywords: Risk, Return, Banking Stocks, Weights.

INTRODUCTION

In recent times Indian banking industry has saw the turnout of state-of-the-art banking models like payments and small finance banks. Reserve Bank of India's innovative measures may go a long way in facilitating the reform of the domestic banking sector in India. In the financial year India's digital advancing stood at US\$ 75 billion and it is anticipated to reach US\$ 1 trillion by FY2023 urged by the five-fold increase in the digital pay-outs. An investment or employment of funds in the security is an asset or item that is obtained with the expectation that it will generate positive returns or will get appreciated in near future. In current scenario various number of investment alternative are available for the investors to with different risk and return trade-off. The investor can invest their money in real estate, banks, insurance sector, chit funds, capital market, mutual funds etc. to generate income. Each sector in the stock market occupies a unique position and provides an opportunity for the investor to earn more return by investing their money, in the short span of time period. Investing money in different sectors such as Automobile, IT, FMCG, Banking, Pharmaceutical and Telecommunication etc. in the share market is unpredictable and unstable in nature. The gain and loss in the investment depends on the volatility in the market and along with investment strategy adopted by the investor. Risk and return are two significant factors of the investment in securities. It was assumed that the greater risk will reward higher return. Investment in government securities carry low risk and in turn will generate low rate of return. Analysis of risk associated with specific stock helps an investor to plan his portfolio and to minimize the risk associated with the investment. Capital appreciation, positive

hedge against inflation, yield are the different types of returns that an investor can generate through investment. The extent of risk differs upon the characteristics of asset, mode of investment, timing of investment etc.

STATEMENT OF THE PROBLEM

Banking sector in India is the pillar of Indian economy and it plays a significant role in country's economic development. It was known that investing money in share market is a stress free task. The stock market is exposed to great volatility especially when it comes to banking sector, since this sector is directly affected by non RBI policy and policies issued. This research aims to analyse the risk and return analysis of selected banking stocks in Indian stock market (NSE).

REVIEW OF LITERATURE

Premachandran (2016), conducted a study on Volatility and Return of Indian Banking sector index and also analysed risk and return of 12 banks listed in Bank Nifty. The study covers a period of one year starting from first April 2015 to 31st March 2016. Daily returns, Beta and standard deviation were the tools used for analysis to measure the volatility in stock prices. The findings of the study revealed that the beta values of all the selected sample bank was greater than one, except for HDFC bank which infers that the bank stocks are highly volatile than the market.

Krishnaprabha and Vijayakumar (2015) performed a study on risk and return analysis of selected stocks in India. The study was not confined to Banking sector, IT sector, Automobile sector, Pharmaceutical Sector, Fast Moving Consumer Goods Sector. The study incorporates five companies from every sector. The period of the study was 5 years from January 2010 to December 2014. The major tool employed for analysis are Beta, Standard Deviation & variance. They concluded that Banking sector and Automobile Sector possess high risk and gives low return on the other hand IT sector, Fast moving consumer goods and Pharmaceutical possess low risk and high return.

Rashinkar and Divya (2014), made an attempt to study the Market Risk Analysis of selected Banking Stock in India with a sample size of five nationalized banks in India. The banks includes State Bank of India, Industrial Development Bank of India, Syndicate Bank, Punjab National Bank, Bank of Baroda were taken for the study for a period of one year from July 2013 to March 2014. They applied Beta Coefficient as tool for the analysis purpose. The results of the study revealed that the beta coefficient of State Bank of India, Industrial Development Bank of India, and syndicate bank were negative which infers that these stocks are moved against the market and less affected by market risk. It was also found that the betas of Punjab National Bank & Bank of Baroda were greater than one and it indicates that these stocks were exposed to high market risk.

Oemenike and Ani (2014), made an attempt to study the volatility of banking sector stock returns in Nigeria, with a sample size of most capitalized and liquid banks listed on the Nigerian stock exchange. The sample banks taken for the study includes Access bank Plc, ETI Plc, Diamond bank Plc, FidelitybankPlc, and GTB Plc. Others are: Skye bank Plc, Sterling bank Plc, United Bank for Africa, Union bank Plc, and Zenith bank Plc. The study covers a period of six years from January 2006 and ends December 2012. ARMAGARCH Model is the tools used for analysis purpose. The study shows that stock returns volatility of

the Nigerian banking sector move in cluster and that volatility persistence is high for the sample period. The results also indicate that stock returns distribution of the banking sector is leptokurtic and that sign of the innovations have insignificant influence on the volatility of stock returns of the banks.

OBJECTIVE OF THE STUDY

- To analyse the risk and return analysis of selected banking stocks.
- To make comparative study on the performance of selected public sector bank and private sector bank in Indian capital market.

SCOPE OF THE STUDY

The study analyse the average return, variance ad standard deviation of the selected banking stocks in India.

RESEARCH METHODOLOGY

Research Design

A research is the framework and plan for the study that guides the collection and analysis of data. Analytical research technique was applied to conduct a study. Analytical research is designed to analyse the facts and information available to make an essential evaluation.

Source of Data

The study is based on secondary data. The daily share price of six selected stocks both private sector and public sectors banks were taken for the study for a period of one year from April 2018 to March 2019. The sample size of the banks included top six selected bank stocks that constituents by weightage in the NIFTY bank Index. The selected sample banks are listed below.

S.No.	Top six sample banks constituents in NIFTY Bank Index	Weightages in NIFTY Bank Index (in %)
1	HDFC Bank Ltd.	33.05
2	ICICI Bank Ltd.	17.90
3	Kotak Mahindra Bank Ltd.	13.33
4	Axis Bank Ltd.	11.70
5	State Bank of India	9.79
6	IndusInd Bank Ltd.	6.09

DATA ANALYSIS

Rate of Return

. Return indicates the gains and losses occurred from trading a security in the share market. Rate of return is calculated by

$$R = \frac{P_1 - P_0}{P_0}$$

Where,

- R - Rate of Return in Percentage
- P₁ - Closing Price of the stock
- P₀ - Initial / Previous month Stock Price

HDFC Bank Ltd. – Return

Month	Closing Price	Return
Apr-18	1,944.30	3.09
May-18	2,139.45	10.04
Jun-18	2,108.45	-1.45
Jul-18	2,179.50	3.37
Aug-18	2,061.20	-5.43
Sep-18	2,006.05	-2.68
Oct-18	1,911.75	-4.70
Nov-18	2,128.45	11.34
Dec-18	2,121.70	-0.32
Jan-19	2,079.95	-1.97
Feb-19	2,077.55	-0.12
Mar-19	2,318.90	11.62
	Average Return	1.90

ICICI Bank Ltd. - Return

Month	Closing Price	Return
Apr-18	284.2	2.10
May-18	285.8	0.56
Jul-18	304.25	6.46
Sep-18	305.55	0.43
Feb-18	313.25	2.52
Aug-18	342.6	9.37
Feb-19	350.15	2.20
Oct-18	355	1.39
Nov-18	355.15	0.04
Dec-18	360.15	1.41
Jan-19	364.45	1.19
Mar-19	400.5	9.89
	Average Return	3.13

Kotak Mahindra Bank Ltd. - Return

Month	Closing Price	Return
Apr-18	1,211.10	15.59
May-18	1,334.60	10.20
Jun-18	1,342.95	0.63
Jul-18	1,306.85	-2.69
Aug-18	1,287.25	-1.50
Sep-18	1,141.60	-11.31
Oct-18	1,119.15	-1.97
Nov-18	1,233.95	10.26

Dec-18	1,256.50	1.83
Jan-19	1,255.75	-0.06
Feb-19	1,213.10	-3.40
Mar-19	1,334.50	10.01
	Average Return	2.29

Axis Bank Ltd. - Return

Month	Closing Price	Return
Apr-18	517.3	1.33
May-18	545.9	5.53
Jun-18	510.8	-6.43
Jul-18	550.4	7.75
Aug-18	649.25	17.96
Sep-18	613.25	-5.54
Oct-18	582.4	-5.03
Nov-18	625.75	7.44
Dec-18	619.9	-0.93
Jan-19	722.7	16.58
Feb-19	709.55	-1.82
Mar-19	777.25	9.54
	Average Return	3.87

State Bank of India - Return

Month	Closing Price	Return
Apr-18	246.4	-1.40
May-18	269.55	9.40
Jun-18	259.35	-3.78
Jul-18	293.5	13.17
Aug-18	309.6	5.49
Sep-18	265.5	-14.24
Oct-18	281.4	5.99
Nov-18	284.65	1.15
Dec-18	295.9	3.95
Jan-19	293.65	-0.76
Feb-19	269.05	-8.38
Mar-19	320.75	19.22
	Average Return	2.48

IndusInd Bank Ltd. - Return

Month	Closing Price	Return
Apr-18	1,898.00	5.64
May-18	1,955.45	3.03
Jun-18	1,932.20	-1.19
Jul-18	1,995.15	3.26
Aug-18	1,906.60	-4.44
Sep-18	1,690.05	-11.36
Oct-18	1,425.10	-15.68
Nov-18	1,631.80	14.50
Dec-18	1,599.30	-1.99
Jan-19	1,505.55	-5.86
Feb-19	1,473.85	-2.11
Mar-19	1,780.00	20.77
	Average Return	0.38

Interpretation

It was interpreted from the above table Axis Bank Ltd., ranks first with an average return of 3.87 percent followed by ICICI Bank Ltd., ranks second with an average return of 3.13 percent. So, it is advisable for the investor to invest in the above two stocks to avail good return among the selected samples.

Risk / Standard Deviation

The risk is associated with the investments in each stocks. The calculation of risk is the best measured for investment in equity shares, by examining the variance of actual returns around the expected return. Standard Deviation of a portfolio is calculated by using formula

Standard Deviation = $\sqrt{\text{Variance}}$

$$\text{Variance}^2 = \frac{1}{n} \sum (R - \bar{R})^2$$

n - Numbers of years

R - Return

\bar{R} - Average Return

HDFC Bank Ltd. – Risk / Standard Deviation

Month	Closing Price	Return	Average Return	Return-Average Return	(Return-Average Return) ²
Apr-18	1,944.30	3.09	1.90	1.19	1.41
May-18	2,139.45	10.04	1.90	8.14	66.22
Jun-18	2,108.45	-1.45	1.90	-3.35	11.21
Jul-18	2,179.50	3.37	1.90	1.47	2.16
Aug-18	2,061.20	-5.43	1.90	-7.33	53.69
Sep-18	2,006.05	-2.68	1.90	-4.57	20.93
Oct-18	1,911.75	-4.70	1.90	-6.60	43.56
Nov-18	2,128.45	11.34	1.90	9.44	89.04
Dec-18	2,121.70	-0.32	1.90	-2.22	4.91
Jan-19	2,079.95	-1.97	1.90	-3.87	14.95
Feb-19	2,077.55	-0.12	1.90	-2.01	4.06
Mar-19	2,318.90	11.62	1.90	9.72	94.44
	Average Return	1.90		Variance	33.88
				Standard Deviation	5.82

ICICI Bank Ltd. – Risk / Standard Deviation

Month	Closing Price	Return	Average Return	Return-Average Return	(Return-Average Return) ²
Apr-18	284.2	2.10	3.13	-1.03	1.06
May-18	285.8	0.56	3.13	-2.57	6.59
Jul-18	304.25	6.46	3.13	3.33	11.06
Sep-18	305.55	0.43	3.13	-2.70	7.31
Feb-18	313.25	2.52	3.13	-0.61	0.37
Aug-18	342.6	9.37	3.13	6.24	38.93
Feb-19	350.15	2.20	3.13	-0.93	0.86
Oct-18	355	1.39	3.13	-1.75	3.05
Nov-18	355.15	0.04	3.13	-3.09	9.53
Dec-18	360.15	1.41	3.13	-1.72	2.97
Jan-19	364.45	1.19	3.13	-1.94	3.75
Mar-19	400.5	9.89	3.13	6.76	45.72
	Average Return	3.13		Variance	10.93
				Standard Deviation	3.31

Kotak Mahindra Bank Ltd. – Risk / Standard Deviation

Month	Closing Price	Return	Average Return	Return-Average Return	(Return-Average Return) ²
Apr-18	1,211.10	15.59	2.95	12.64	159.72
May-18	1,334.60	10.20	2.95	7.25	52.57
Jun-18	1,342.95	0.63	2.95	-2.32	5.39
Jul-18	1,306.85	-2.69	2.95	-5.63	31.75
Aug-18	1,287.25	-1.50	2.95	-4.45	19.77
Sep-18	1,141.60	-11.31	2.95	-14.26	203.39
Oct-18	1,119.15	-1.97	2.95	-4.91	24.14
Nov-18	1,233.95	10.26	2.95	7.31	53.45
Dec-18	1,256.50	1.83	2.95	-1.12	1.25
Jan-19	1,255.75	-0.06	2.95	-3.01	9.04
Feb-19	1,213.10	-3.40	2.95	-6.34	40.24
Mar-19	1,334.50	10.01	2.95	7.06	49.85
	Average Return	2.29		Variance	54.21
				Standard Deviation	7.36

Axis Bank Ltd. – Risk/Standard Deviation

Month	Closing Price	Return	Average Return	Return-Average Return	(Return-Average Return) ²
Apr-18	517.3	1.33	3.87	-2.53	6.42
May-18	545.9	5.53	3.87	1.66	2.77
Jun-18	510.8	-6.43	3.87	-10.29	105.98
Jul-18	550.4	7.75	3.87	3.89	15.11
Aug-18	649.25	17.96	3.87	14.09	198.66
Sep-18	613.25	-5.54	3.87	-9.41	88.55
Oct-18	582.4	-5.03	3.87	-8.90	79.13
Nov-18	625.75	7.44	3.87	3.58	12.80
Dec-18	619.9	-0.93	3.87	-4.80	23.04
Jan-19	722.7	16.58	3.87	12.72	161.75
Feb-19	709.55	-1.82	3.87	-5.68	32.32
Mar-19	777.25	9.54	3.87	5.68	32.22
	Average Return	3.87		Variance	63.23

				Standard Deviation	7.95
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State Bank of India – Risk/Standard Deviation

Month	Closing Price	Return	Average Return	Return-Average Return	(Return-Average Return) ²
Apr-18	246.4	-1.40	2.48	-3.88	15.08
May-18	269.55	9.40	2.48	6.91	47.78
Jun-18	259.35	-3.78	2.48	-6.27	39.27
Jul-18	293.5	13.17	2.48	10.68	114.16
Aug-18	309.6	5.49	2.48	3.00	9.02
Sep-18	265.5	-14.24	2.48	-16.73	279.79
Oct-18	281.4	5.99	2.48	3.51	12.29
Nov-18	284.65	1.15	2.48	-1.33	1.76
Dec-18	295.9	3.95	2.48	1.47	2.16
Jan-19	293.65	-0.76	2.48	-3.24	10.52
Feb-19	269.05	-8.38	2.48	-10.86	117.94
Mar-19	320.75	19.22	2.48	16.73	279.99
	Average Return	2.48		Variance	77.48
				Standard Deviation	8.80

IndusInd Bank Ltd. – Risk/Standard Deviation

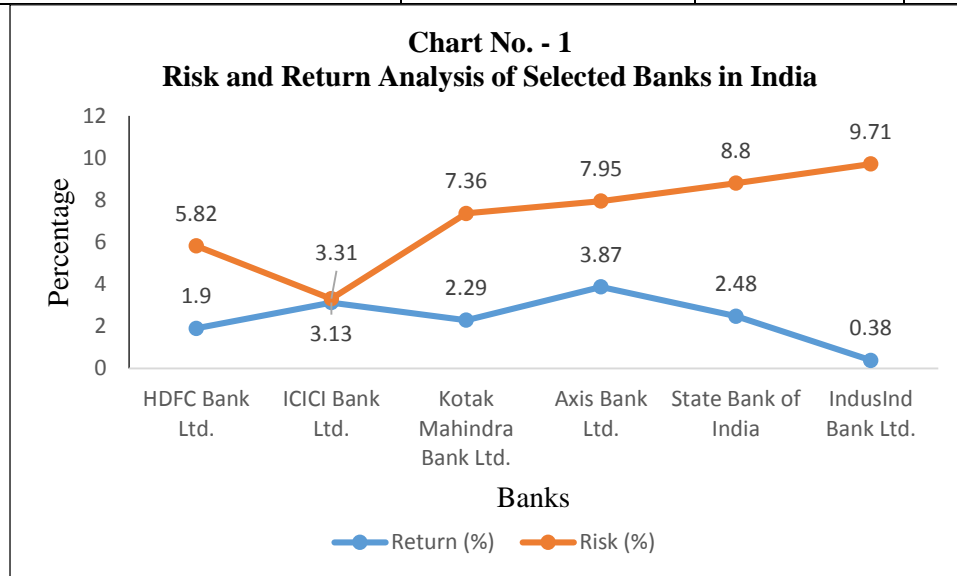
Month	Closing Price	Return	Average Return	Return-Average Return	(Return-Average Return) ²
Apr-18	1,898.00	5.64	0.38	5.25	27.60
May-18	1,955.45	3.03	0.38	2.65	7.00
Jun-18	1,932.20	-1.19	0.38	-1.57	2.47
Jul-18	1,995.15	3.26	0.38	2.88	8.28
Aug-18	1,906.60	-4.44	0.38	-4.82	23.23
Sep-18	1,690.05	-11.36	0.38	-11.74	137.81
Oct-18	1,425.10	-15.68	0.38	-16.06	257.87
Nov-18	1,631.80	14.50	0.38	14.12	199.46
Dec-18	1,599.30	-1.99	0.38	-2.37	5.63
Jan-19	1,505.55	-5.86	0.38	-6.24	38.98
Feb-19	1,473.85	-2.11	0.38	-2.49	6.18
Mar-19	1,780.00	20.77	0.38	20.39	415.79
	Average Return	0.38		Variance	94.19
				Standard Deviation	9.71

Interpretation

It was found from the above tables the Standard deviation of ICICI Bank Ltd. is 3.31percent, which is lower compared to banks of HDFC Bank Ltd., Kotak Mahindra Bank, Axis Bank Ltd., State Bank of India and IndusInd Bank. So, it is safe to invest in ICICI Bank Ltd. So it is safe to invest in ICICI Bank Ltd. shares as the deviation in prices is low.

S.No.	Top six sample banks constituents in NIFTY Bank Index	Weightages in NIFTY Bank Index (in %)	Return (%)	Risk (%)
1	HDFC Bank Ltd.	33.05	1.90	5.82
2	ICICI Bank Ltd.	17.90	3.13	3.31
3	Kotak Mahindra Bank Ltd.	13.33	2.29	7.36
4	Axis Bank Ltd.	11.70	3.87	7.95

5	State Bank of India	9.79	2.48	8.80
6	IndusInd Bank Ltd.	6.09	0.38	9.71



FINDINGS

- Individual returns on the selected bank stocks of HDFC Bank Ltd, ICICI Bank Ltd., Kotak Mahindra Bank Ltd., Axis Bank Ltd., State Bank of India and IndusInd Bank Ltd. are 1.90%, 3.13%, 2.29%, 3.87%, 2.48% and 0.38% respectively.
- Individual risks on the selected bank stocks of HDFC Bank Ltd, ICICI Bank Ltd., Kotak Mahindra Bank Ltd., Axis Bank Ltd., State Bank of India and IndusInd Bank Ltd. are 5.82%, 3.31%, 7.36%, 7.95%, 8.80% and 9.71% respectively.

SUGGESTIONS

- Among the six stocks selected for analysis, all the stocks have given positive returns. Axis Bank and HDFC Bank has been giving good profits of over 3% while the other banks have also given good returns. All the companies seem to be a good bet for investment.
- Comparing the individual risks, IndusInd bank Ltd., State Bank of India, Axis Bank Ltd., and Kotak Mahindra Bank Ltd. are high risky stocks compared to the other securities like ICICI Bank Ltd. and HDFC Bank Ltd. It is suggested that the investors should be careful while investing in high risk securities.
- The investors who require good returns with low risk can make investment in ICICI Bank Ltd. shares.
- It is suggested for the risk averse investors to avoid the stocks of IndusInd Bank which has minimum return of 0.38 percent with higher risk of 9.71 percent.

CONCLUSION

The capital market investment is always exposed to high risk and high return. So every investors have to exploit timely investment strategies in order to endure in the market and obtain the benefit of making profit by trading securities. In stock market there are numbers of Investment avenues are available, among them banking is considered as one of the sensitive avenue for investment. Volatility in prices leads to higher

risk for the investors. The present study focussed on the risk and return analysis of selected banks in India and it is important for an investors to analyse the risk associated with stocks.

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