IMPACT OF INDIAN BANKING CRISIS ON PERFORMANCE OF SELECTED NIFTY BANK EXCHANGE TRADED FUNDS IN INDIA

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ABSTRACT

Exchange-Traded Funds (ETFs) were first introduced in USA in 1993. About 60% of trading volumes on the American Stock Exchange are reported to be from ETFs. As per the ETF landscape report released by BlackRock Inc. (a US-based AMC), ETFs have grown by 33.2%, compounded annually in the past 10 years, and 26.1% in the past five years, globally. First ETF in India Nifty BeEs based on Nifty 50, was launched in January 2002 by Bench mark mutual fund. The concept of Exchange-Traded Funds (ETFs) is very popular in foreign countries, but in India, it is still in the initial growth phase. Exchange traded funds are baskets of securities that are traded on the recognized stock exchanges. It is hybrid financial product consist twin features of stock and mutual fund. This study examines performance of selected 10 bank ETFs listed on national stock exchange in India. This study is based on secondary data covering a period of 5 years from 2013 to 2017. The parameters are used for evaluating the performance are return, risk, beta, R-square, Sharpe ratio and Jensen's alpha.

Keywords: Exchange traded fund**,** Beta, R- square, Nifty BeES.

INTRODUCTION

An ETF refers to a diversified basket of securities that is traded in real time like an individual stock on exchange. Unlike regular open-ended mutual funds; ETFs can be bought and sold throughout the trading day like any other stock. An ETF is similar to an index fund, but the ETFs can invest in either all of the securities or a representative sample of the securities included in the index. Exchange-traded funds first came into existence in the USA in 1993. Importantly, the ETFs offer a one-stop exposure to a diversified basket of securities that can be traded in real time like an individual stock. The first ETF in India, the "NIFTY BEES (Nifty Benchmark Exchange Traded Scheme) based on Nifty 50 was launched in December 2001 by Benchmark Mutual Fund. It is bought and sold like any other stock on NSE and has all characteristics of an index fund.

The recent bank crisis has affected the Indian stock market over time in terms of stock market volatility and performance. Banking crisis is a situation in which the value of financial institutions or assets drops rapidly and it is often associated with a panic or a run on the banks, in which investors sell off assets or withdraw money from savings accounts with the expectation that the value of those assets will drop if they remain at a financial institution. In the year of 2017 and 2018 observed the arrival of Indian banking crisis which had bought the havoc to the Indian stock markets. Fall in stock prices on information investment bankers and companies are collapsing. The Indian stock markets suffered huge losses and the SENSEX and NIFTY down to its level.

Table: 1-Growth of ETFs in India

Year	No of ETFs	AUM (Rs.Crore)	Increase or Decrease of AUM	% of Increase or Decrease of AUM
Dec.2001	1	3.61	---	-----
Dec.2002	1	7.23	3.62	200.28
Dec.2003	3	205.95	198.72	2848.55
Dec.2004	4	498.54	292.59	242.07
Dec.2005	4	2855.82	2357.28	572.84
Dec.2006	4	7811.11	4955.29	273.52
Dec.2007	10	7141.74	-669.37	-91.43
Dec.2008	13	3119.11	-4022.63	-43.67
Dec.2009	15	2461.72	-657.39	-78.92
Dec.2010	22	4959.16	2497.44	201.45
Dec.2011	27	10668	5708.84	215.12
Dec.2012	28	13668	3000	128.12
Dec.2013	33	10273	-3395	-75.16
Dec.2014	38	13260	2987	129.08
Dec.2015	45	17661	4401	133.19
Dec.2016	45	34353	16692	194.51
Dec.2017	47	43234	8881	100.01

(Source: www.valueresrearch.com)

REVIEW OF LITERATURE

Prashanta Athma and Raj Kumar (2011): Evaluate the performance of ETFs and index fund by using the statistical tools like standard deviation, beta, alpha, R-Squared and Sharpe's ratio. ETFs given better opportunity for small investors in terms of diversified portfolios compared to index fund.

Preeti Singh (2011): ETFs are compared with Mutual Funds in terms of expenses, time consuming, liquidity and risk. considering all the mentioned facts it is found that exchange trade funds is the most appropriate trade as it is less expenses have more risks but less loses, also it is friendly to the traders having less capital in hand. Exchange trade follows the market trends the money of investors can be liquefied according to desires whenever there is need to buy or sell the stock.

Swati Garg and Y. P. Singh (2013): Evaluate the performance of ETFs and index fund, ETFs performs better over long term investment horizon and that short term investor's faces disadvantage on investing on ETFs.

S.Narend (2014): Evaluate the performance of ETFs and index fund by using tracking errors, active return and Jensen's alpha the index fund given best performance in terms of tracking errors and Jensen's alpha. ETFs given best performance in terms of active returns.

Garg (2014): Examined 12 ETFs listed on NSE over a period of 8 years from January 2002 to 2009. No significant bias in performance is found over long term investment horizon.

Gerasimos G. Rompotis (2015): Evaluate the performance of ETFs and mutual fund in terms of expenses and return, performance of the ETFs in respect of the return is better than mutual fund and in terms of expenses mutual funds are more expensive than ETFs.

NEED FOR THE STUDY

The impressive growth of exchange traded funds in India has attracted the attention of Indian researchers, individuals and institutional investors during past few years. A number of empirical studies have been conducted to examine the growth and performance of exchange traded funds in India. The recent bank crisis has affected the Indian stock market over time in terms of stock market volatility and performance, the crisis also affect on Exchange traded fund investors Therefore, the present study aims at making impact of Indian banking crisis on performance of selected nifty bank ETFs in India, in order to know the barriers for the growth and performance of the ETFs in India.

OBJECTIVES OF STUDY

To evaluate the effect of Indian banking crisis on performance of selected nifty bank ETFs

To analyze the portfolio attributes of selected nifty bank ETFs

To find out the best nifty bank ETF on the basis of risk and return perspective.

SCOPE OF STUDY

The study is limited to a select sample of nifty bank ETFs which are listed in national stock exchange India. Study period is limited to 5 years from 2014 to June 2018. It is planned to compare the performance of selected nifty bank ETFs during study period.

METHODOLOGY OF STUDY

(a) **Period of Study:** the present study has analyzed the performance of selected nifty ETFs for the 5 years from 2014 to June 2018.

(b) **Source of Data:** The sample ETFs related data were collected from www.value research.com, NSE, money control websites, journal and textbooks.

(c) **Sample Size:**

Table; 2- Sample Size of Selected Nifty Bank ETFs

SI NO	Name of ETFs	Category	Underlying Index	Launch Date	AUM as on 30-06-2018
1	ICICI Prudential Nifty 100	Equity Large Cap	Nifty 100	20-08-2013	4
2	ICICI Prudential Nifty	Equity Large Cap	Nifty 100	20-03-2013	984
3	ICICI Prudential Nifty Next 50 Index Fund	Equity Large Cap	Nifty Next 50	25-06-2010	3,000
4	Kotak Nifty ETF	Equity Large Cap	Nifty 50	02-02-2010	575
5	Kotak PSU Bank ETF	Equity Sector Banking	Nifty PSU Bank	08-11-2007	90
6	Reliance ETF Bank BeES	Equity Sector Banking	Nifty Bank	27-05-2004	3,823
7	Reliance ETF NIFTY 100	Equity Large Cap	Nifty 100	22-03-2013	8
8	IDBI Nifty Index Fund	Equity Large Cap	Nifty 50	25-06-2010	225
9	SBI ETF Nifty 50	Equity Large Cap	Nifty 50	20-07-2015	41,244

10	UTI Nifty ETF	Equity Large Cap	Nifty 50	25-06-2010	3,000

(d) Tools Used: The performance of sample exchange traded funds has been evaluated by using returns, SIP returns, standard deviation, beta, and Sharpe ratio, R- square and alpha.

RESULTS AND DISCUSSION

1. ANALYSIS OF PERFORMANCE OF BANK ETFs

Table: 3- Fund Returns of Selected Nifty Bank Exchange Traded Fund on Different Years

SI NO	Name of ETFs	6 Months	1 Year	2 Year	3 Year	5 Year
1	ICICI Prudential Nifty 100	13.39	15.98	14.93	16.43	17.62
2	ICICI Prudential Nifty	15.19	18.12	15.34	16.67	16.54
3	ICICI Prudential Nifty Next 50 Index Fund	3.81	2.77	12.80	15.15	21.20
4	Kotak Nifty ETF	15.20	18.13	15.33	16.13	16.03
5	Kotak PSU Bank ETF	10.53	-4.02	-2.60	3.06	8.69
6	Reliance ETF Bank BeES	14.27	13.38	16.36	20.62	22.97
7	Reliance ETF NIFTY 100	13.52	15.27	14.43	15.95	16.91
8	IDBI Nifty Index Fund	14.12	15.78	13.09	14.39	14.61
9	SBI ETF Nifty 50	15.26	18.26	15.46	16.81	-----
10	UTI Nifty ETF	15.23	18.22	15.52	16.91	-----

(Source: www.valueresresarch.com)

Table: 4- SIP Returns of Selected Nifty Bank Exchange Traded Fund on Different Years

SI NO	Name of ETFs	6 Months	1 Year	2 Year	3 Year	5 Year
1	ICICI Prudential Nifty 100	33.11	19.51	18.77	18.00	14.92
2	ICICI Prudential Nifty	36.19	22.07	20.11	18.60	14.77
3	ICICI Prudential Nifty Next 50 Index Fund	-1.28	-0.94	9.36	14.27	15.99
4	Kotak Nifty ETF	36.20	22.05	20.12	18.34	14.31
5	Kotak PSU Bank ETF	27.43	-4.26	-4.05	2.28	1.07

6	Reliance ETF Bank BeES	22.07	14.50	18.77	20.64	18.36
7	Reliance ETF NIFTY 100	32.74	18.76	18.16	17.46	14.42
8	IDBI Nifty Index Fund	33.85	19.82	17.77	16.31	12.70
9	SBI ETF Nifty 50	36.35	22.19	20.25	18.74	-----
10	UTI Nifty ETF	36.29	22.13	20.26	18.79	------

(Source: www.valueresresearch.com)

2. ANALYSIS OF PORTFORILO ATTRIBUTES

Table: 5 - Risk Profile of Selected Nifty Bank ETFs

SI NO	Name of ETFs	Std Deviation	Sharpe Ratio	Beta	R-Square	Alpha
1	ICICI Prudential Nifty 100	13.03	0.63	0.98	0.99	-0.12
2	ICICI Prudential Nifty	13.19	0.64	1	1	-0.10
3	ICICI Prudential Nifty Next 50 Index Fund	15.77	0.64	0.99	0.69	1.59
4	Kotak Nifty ETF	13.14	0.61	0.99	1	-0.52
5	Kotak PSU Bank ETF	32.44	-0.00	1.40	0.61	-17.48
6	Reliance ETF Bank BeES	18.02	0.66	1	1	-0.38
7	Reliance ETF NIFTY 100	13.16	0.60	0.99	0.99	-0.60
8	IDBI Nifty Index Fund	13.16	0.49	1	1	-2.06
9	SBI ETF Nifty 50	13.21	0.65	1	1	0.02
10	UTI Nifty ETF	28.32	0.21	0.88	0.96	4.77

(Source: www.valueresresearch.com)

(a) Standard Deviation: It measures the total risk from the average return. It depicts the 'quality rating' of an average. It is observed that the standard deviation of the bank ETFs ranges between 13.03 and 32.44. Analysis reveals that total risk is highest for the Kotak PSU Bank ETF (32.44), followed by UTI Nifty ETF (28.32), hence, on the basis of standard deviation of the selected schemes, it is observed that Kotak PSU Bank ETF is most volatile among the selected ETF schemes.

(b) Sharpe Ratio: Sharpe ratio and Treynor ratio are useful to compare the performance of number of funds. Sharpe ratio is a useful measure of risk adjusted return. It reflects the returns generated per unit of total risk. Higher the Sharpe ratio, the better is the performance of the fund under analysis. Analysis of Sharpe ratio the value for the selected Bank ETF schemes varies between -0.00 to 0.66. All the selected schemes have shown positive return per unit of risk except Kotak PSU Bank ETF. It indicates that the risk premium generated by the selected funds for the assumption of total risk by the investors is sufficient and good. Reliance ETF Bank BeES have shown a high return of .66 per unit of total risk followed by SBI ETF Nifty 50 i.e.65 and Low return to Kotak PSU Banking ETF.

(c) Beta: The Systematic risk is measured in terms of beta which indicates the sensitivity of a scheme return in relation to market index. The beta value of an index itself is taken as one. If a scheme's beta is less than 1, it is considered to be defensive. If a scheme's beta is more than 1, it is considered to be aggressive. Analysis of table 5 points out that the beta value for the selected Bank ETFs ranges between 0.88 and 1.40. Beta values for the entire bank ETFs are 1 or more than one which indicates that all the selected ETFs are aggressive in nature. The value of beta is highest for Kotak PSU Bank ETFs (1.40) and it is lowest for UTI Nifty ETF (0.88). On the basis of beta value, it is found that that Kotak PSU Bank ETFs is the most aggressive ETF amongst the entire banking exchange traded funds.

(d) R-Squared Value: Beta and R-squared should be used together when examining a fund's risk profile. They are as inseparable as risk and return. The R-squared value shows how reliable the beta number is. It varies between zero and one. An R-squared value of one indicates perfect correlation with the index. For ETFs, an R-squared value greater than 0.80 is generally accepted to mean that the underlying beta value is reliable. Analysis of results shows that the R Squared values of the selected exchange traded funds falls between 0.61 and 1. It is found that R- Squared values of all the selected bank ETFs is more than 0.80 except one ETFs i.e. Kotak PSU Bank ETF. Hence, it indicates that beta values are reliable, except those to ETFs and the other Bank ETF family has closely performed in relation to the index.

(e) Alpha: The intercept of the charactestic regression line is alpha. A positive value of alpha is a healthy sign. Among selected bank ETFs it is found that ICICI Prudential nifty Next 50 Index Fund, SBI ETF nifty 50 and UTI nifty ETF alpha values is positive rest banks ETFs shown negative alpha.

FINDINGS AND SUGGESTIONS

FINDINGS

1) Index (nifty) ETFs perform better than other common ETFs.
2) The performance of reliance ETF bank BeES is best among the selected nifty bank ETFs.
3) The performance of Kotak PSU Bank ETF not good among the selected nifty bank ETFs
4) On the basis of analysis it is found that maximum selected ETFs are aggressive in nature.
5) Maximum selected ETFs found that negative alpha which indicates passive nature of investment on ETFs.

SUGGESTIONS

1) An investor can invest in exchange traded fund for short term and long term to make profit.
2) It is a best investment for aggressive investors as its beta is highest on all selected banking ETFs.

3) Investors are advice to construct ETFs portfolio matched to one's personal goals and risk profile.
4) Investors are advice to fundamental and technical analysis before investment on ETFs portfolio.
5) Exchange Traded Funds can became best investment alternative if awareness is created among the investors.
6) Investors are advice to invest small proportion of investment on bank ETFs during banking crisis.

CONCLUSION

This research paper evaluates performance of selected 10 nifty bank ETFs traded on Indian stock market. The study also examined and forecasted the risk and return by using performance indicators like standard deviation, beta, R-square, alpha and Sharpe ratio. Based on study the performance of Index ETFs on the basis of various risk adjusted and non-risk performance indicators that the ETFs have been performing better than the common benchmark. They have given out better excess returns not only for per unit systematic risk but also for per unit of volatility or standard deviation.

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