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Performance Evaluation of Nifty Financial Services Companies

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ABSTRACT:

The two side of Investment is – Risk and Return. This paper attempt to analyze the performance of Nifty Financial service companies. The performance evaluation of Nifty Financial Service is carried out through relative performance index, risk-return analysis, Treynor's ratio, Sharpe's ratio, Jensen's measure. The data used are monthly high of NAVs. The source of data is website of National Stock Exchange (NSE). NSE has been a driving force of capital market in India. It plays a critical role with regulators, government and market participants in development of capital markets. 2019 marks NSE's Silver Jubilee in their journey. Study period is 2014 -15 to 2018-19. This study focus with a sample of 5 schemes for computing relative performance index.

Keywords : Nifty Financial Service, Systematic Risk, Sharpe's Value, Treynor's Value, Portfolio

INTRODUCTION

In today's environment, most of the people are earning and spending. They have more interest on investment. But they don't have adequate information regarding investment. Investment is a wide spread practice and many have made their fortunes in the process. There are many sources of investment. Some are Bonds, Mutual funds, National Pension Scheme, Public Provident Fund, Bank Fixed Deposit, etc. This study focus to build a portfolio containing equity stocks and analyse their risk and return which will further analyze the portfolio's performance in terms of risk –return relationship. Further we have used measures like Treynor's measure, Sharpe's Measure, Jenson's Alpha and CAPM.

SIR JOHN TEMPLETON says This time it's different' are the four most dangerous words in investment. The market moves in cycles, and understanding how the trends change is something Templeton knew all about. He reached billionaire status as a mutual fund investor by looking at how stocks had performed in the past, rather than relying on future speculation. So it is important to analyze the market before building a portfolio. Based on the market performance, one portfolio has been built sector wise for this analysis.

REVIEW OF LITERATURE:

- 1. Arna Suryani, Eva Heriyanti (2015) In this article they had made a portfolio performance analysis for LQ45. The purpose of this research is to analyze the consistency of Sharpe index, Treynor Index and Jensen Index as measurement of risk adjusted performance.
- 2. Chakramon (2004) studies the performance of Thai equity funds. He finds that equity funds, on average , do not provide positive and significant abnormal returns from the market, though they provide higher sharpen's measure.
- 3. Kosowoski, Timmermann, Wermers and White (2006) conducts first comprehensive examination of mutual examination of mutual fund performance (alpha) that explicitly controls for luck without imposing an ex-ante parametric distribution from which fund returns assumed are to be drawn. Specifically, they apply bootstrap approach to analyze the significance of the alpha of extreme funds, that is, funds with

large, positive estimated alphas. In employing the bootstrap to analyze the significance of alpha estimates, they explicitly model and control for the expected idiosyncratic variation in mutual fund returns.

- 4. Peer Mohamed and Abirami (2004) this article has focused on the recent growth of capital markets in India and the need of practitioners in these markets to determine a stable price for securities and achieving expected return have brought theories of predicting securities price more into consideration.
- 5. ShwethaBajpai, Anil K Sharma (2014) their study focuses on rolling regression. Rolling regression is applied on a rolling sample of three years where a window of three years keeps moving for a quarter. Further a comparison is made between developed model and traditional model.

RESEARCH METHODOLOGY:

An index is used to give information about the price movements of products in the financial, commodities or any other products. A stock market index is created by selecting a group of stocks that are representative of the whole market or a specified sector or segment of the market. The composition of an index can change from time to time due to various factors such as merger / acquisition, bankruptcy, restructuring, lack of representation, not fulfilling index selection criteria, etc. The Indian stock market is gaining popularity among many investors and the financial companies which are listed on BSE and NSE, that are gaining familiarity towards Indian Investors. Therefore, the investors should be able to find out a trading opportunity with an optimum portfolio that will yield higher return. The present study is based on analyzing whether investment in CNX Nifty Financial Service companies is more rewarding or not. And if securities are more rewarding, can it be possible to prepare portfolio from the nifty companies.

- ✓ To prepare a portfolio, this is barometer of market, which provides maximum return at a given level of risk.
- ✓ To identify the total and systematic risk
- ✓ To find out target price, based on CAPM, of securities included in portfolio.
- ✓ To study the risk return relationship in Nifty Financial service companies.

SOURCE OF DATA:

The data collected for this study is secondary in nature. The present study is an attempt to test the risk return relationship using capital asset pricing model in Indian market with special reference to National Stock Exchange Ltd during the period between 1st Jan 2014 to 31st March 2019. Samples of 5 companies were selected from among the actively traded stocks of National Stock Exchange. The selected companies are uniquely from Nifty Financial Service sector.

SAMPLING:

Based on National stock Exchange, there are 50 Equity Indian Companies listed in Nifty 50.Out of this, in the first stage, Financial Services Sector are purposively selected as these have higher weight age in NSE Stock Exchange.

In the second stage, HDFC Bank, Housing Development Finance Corporation Ltd., ICICI Bank, Kotak Mahindra Bank and Axis Bank are selected based on their weightage for constructing a portfolio.

SL.NO	COMPANY'S NAME	WEIGHT %
1	HDFC Bank Ltd.	27.24
2	Housing Development Finance Corporation Ltd.	18.86
3	ICICI Bank Ltd.	14.02
4	Kotak Mahindra Bank Ltd.	10.07
5	Axis Bank Ltd.	7.82
6	State Bank of India	6.27
7	Bajaj Finance Ltd.	3.9
8	Bajaj Finserv Ltd.	2.43
9	Indiabulls Housing Finance Ltd.	1.36
10	Bajaj Holding and Investment Ltd.	1.1

Table: 1 Top constituents by weight age

https://www.nseindia.com/content/indices/ind_Nifty_Financial_Services.pdf

NATIONAL STOCK EXCHANGE:

National Stock Exchange also termed as NSE is a Mumbai based Stock exchange. It is one of the biggest stock exchanges in India. It is the second largest in the world by number of trades in equity shares from January to June 2018, according to World Federation of Exchanges (WFE) report. Its main vision is to "continue to be a leader, establish global presence, and facilitate the financial well-being of people". NSE has many products based on the following category.

- 1. Equity and Equity linked products
- 2. Derivatives and
- 3. Debt related products.

EQUITY:

The securities market has two interdependent and inseparable segments, the new issues (primary) market and the stock (secondary) market. The primary market provides the channel for creation and sale of new securities, while the secondary market deals in securities previously issued. The Stock market or Equities market is where listed securities are traded in the secondary market. Currently more than 1300 securities are available for trading on the Exchange.

DERIVATIVES:

Equity derivative is a class of derivatives whose value is at least partly derived from one or more underlying equity securities. Options and futures are by far the most common equity derivatives. 2 major products under Equity derivatives are Futures and Options, which are available on Indices and Stocks.

DEBT MARKET:

The erstwhile Wholesale Debt Market (WDM) segment of the Exchange commenced operations on June 30, 1994. This provided the first formal screen-based trading facility for the debt market in the country. It has now been merged under the New Debt Market as the Negotiated Trade Reporting Platform.

NIFTY 50 INDEX:

The NIFTY 50 index is a well-diversified 50 company's index reflecting overall market conditions. NIFTY 50 Index is computed using free float market capitalization method. It represents the weighted average of 50 Indian company stocks in 13 sectors and is one of the two main stock

indices used in India, the other being the BSE Sensex . The 13 sectors of Nifty 50 are Automobile , Cement and Cement Products , Construction , Consumer goods, Energy , Fertilizers and Pesticides, Financial Services, IT, Media and Entertainment , Metal, Pharma, Service and Telecom. NIFTY 50 can be used for a variety of purposes such as benchmarking fund portfolios, launching of index funds, ETFs and structured products. Based on Table 2, financial services sector is selected for building a portfolio.

SL.NO	SECTOR	SECTOR WEIGHT (%)				
1	FINANCIAL SERVICES	37.18				
2	ENERGY	15.44				
3	IT	14.82				
4	CONSUMER GOODS	10.8				
5	AUTOMOBILE	6.59				
6	METALS	3.81				
7	CONSTRUCTION	3.69				
8	PHARMA	2.53				
9	CEMENT AND CEMENT PRODUCTS	1.63				
10	TELECOM	1.55				
11	FERTILISERS AND PESTICIDES	0.75				
12	MEDIA AND ENTERTAINMENT	0.6				
13	SERVICES	0.59				

Table 2: SECTOR REPRESENTATION

https://www.nseindia.com/content/indices/ind_nifty50.pdf

It represents the fact sheet of Nifty50 index. The performance of each sector is weighted individually. Based on the performance, financial services has higher weighed sector among all

NIFTY FINANCIAL SERVICE:

The Nifty Financial Services Index is designed to reflect the behavior and performance of the Indian financial market which includes banks, financial institutions, housing finance, insurance companies and other financial services companies. The Nifty Finance Index comprises of 20 stocks that are listed on the National Stock Exchange (NSE). NIFTY Financial Services Index is computed using free float market capitalization method, wherein the level of the index reflects the total free float market value of all the stocks in the index relative to particular base market capitalization value.



INDEXING METHODOLOGY for NIFTY FINANCIAL SERVICE INDEX:

Eligibility Criteria for Selection of Constituent Stocks:

- i. Companies must rank within top 800 based on both average daily turnover and average daily full market capitalization for the last six months.
- ii. Companies should form part of Finance Sector.
- iii. The company's trading frequency should be at least 90% in the last six months.
- iv. The company should have a listing history of 6 months. A company, which comes out with an IPO will be eligible for inclusion in the index, if it fulfills the normal eligibility criteria for the index for a 3 month period instead of a 6 month period.
- v. Final selection of 15 companies shall be done based on the free float market capitalization of the companies with an aim to provide adequate representation to sectors such as banks, financial institutions, housing finance and other financial services.

Index Re-Balancing:

Index is re-balanced on semi-annual basis. The cut-off date is January 31 and July 31 of each year, i.e. for semi-annual review of indices, average data for six months ending the cut-off date is considered. Four weeks prior notice is given to market from the date of change.

Index Governance:

A professional team manages all NSE indices. There is a three-tier governance structure comprising the Board of Directors of NSE Indices Limited, the Index Policy Committee and the Index Maintenance Sub-Committee.

	Nifty 50	КОТАК	ICICI	HDFC BANK	HDFC	AXIS
STANDARD DEVIATION	0.84	2.05	2.96	1.06	1.55	2.93
DEVIATION		1.21	2.12	0.22	0.71	2.09
RISKINESS		Avg risk	High risk	Less risk	Avg Risk	High risk
		3	5	1	2	4

TABLE 3: RISK RELATED ANALYSIS

Source: computed from annual reports of the sample units from 2014-15 to 2018-19.

Table 3 shows the average standard deviation values of each scheme with corresponding Nifty 50. A closure look at the above table reveals that HDFC Bank has less risk when compared to other schemes, followed by Housing Development Financial Corporation (ranked 2nd), Kodak Bank ranked 3rd, Axis Bank ranked 4th, ICICI Bank indicating high risk ranked 5th .Above analysis reveals HDFC Bank is yielding consistent returns with less risk over the counterpart select schemes.

TABLE 4: RETURNS VERSUS STANDARD DEVIATION OF SELECT SCHEMES

Name of the Schemes	ARp	SDp	Deviation		Situation
			ARp	SDp	
КОТАК	0.072	2.05	0.024	1.21	ARp>ARm; SDp <sdm< th=""></sdm<>
ICICI	-0.01	2.96	-0.058	2.12	ARp>ARm; SDp <sdm< th=""></sdm<>
HDFC BANK	0.097	1.06	0.049	0.22	ARp>ARm; SDp <sdm< th=""></sdm<>
HDFC	0.0752	1.55	0.027	0.71	ARp>ARm; SDp <sdm< th=""></sdm<>
AXIS	0.04012	2.93	-0.008	2.09	ARp>ARm; SDp <sdm< th=""></sdm<>
Nifty 50	0.048	0.84			

Source: computed from annual reports of the sample units from 2014-15 to 2018-19.

Table 4 provides the information about the average return of the portfolio and average standard deviation of the portfolio of select schemes relating to nifty 50 for the study period. It also provides information about the deviation between the average return of the portfolio (ARp) and average return on the market index (ARm) as well as the standard deviation of the portfolio

(SDp) as compared to the standard deviation of the market (SDm). The comparison between ARp and ARm, SDp and SDm is made to find out higher returns with low risk funds. It is advent from the above table that all funds of the select schemes are falling under the situation characterized (ARP > ARm; SDP < SDm), it implies that the schemes provided higher returns than the market with lower risk compared to a market index, this indicates the favorable performance of schemes in relation to return and risk. Thus, it is concluded that the diversification of portfolios is made from time to time to earn excess returns with lesser risk.

TABLE 5: SYSTEMATIC RISK (BETA) FOR SELECTED SCHEMES

PARTICULARS	Nifty 50	КОТАК	ICICI	HDFC BANK	HDFC	AXIS
BETA	1.18	1.07	1.46	0.81	1.17	1.38
DEVIATION		-0.11	0.28	-0.37	-0.01	0.2
		4	1	5	3	2

Source: computed from annual reports of the sample units from 2014-15 to 2018-19.

Table 5 provides the information about the Beta values of select schemes of Nifty Financial Service for the study period. It is generally known fact that, higher the value of beta higher will be responsiveness of a given fund to the changes in the market index and vice-versa beta value of 1.0 of a fund implies neither over responsiveness nor under responsiveness to the changes in the market. A beta value of greater than 1.0 shows more than a proportionate response to the changes in the market. A beta of less than 1.00 shows less than proportionate responsiveness. From the above table it can be inferred that ICICI Bank has a highest beta value of 1.46 indicating high responsiveness and HDFC Bank has the lowest value of 0.81 which shows less responsive to the changes in the market. Hence, all the schemes except HDFC Bank having beta values of more than 1.0, it can be inferred that, all portfolios except HDFC Bank are aggressive portfolios.

TABLE 6: SHARPE'S VALUES FOR SELECT SCHEMES OF THE NIFTY FINANCIAL COMPANIES AND BENCH MARK VALUES

PARTICULARS	Nifty 50	КОТАК	ICICI	HDFC BANK	HDFC	AXIS
Sharpen's Return	-8.62	-5.97	-3.44	-32.70	-10.16	-3.47
Deviation		2.66	5.18	-24.07	-1.54	5.15
Over / Under		Over	Over	Under	Under	Over
		3	1	5	4	2

Source: computed from annual reports of the sample units from 2014-15 to 2018-19.

Table 6 summarizes the average values of the Sharpe's Index for the select schemes of Nifty Financial companies and the underlying bench mark index for the study period. It is observed from the above table, that 3 selected schemes of Nifty Financial Service companies has over performed and 2 selected companies has underperformed as compared to average performance of bench mark index. The Sharpe index measures the risk premium of the portfolio relative to the total amount of risk in the portfolio. This index measures the slope of the risk-return line, summarizing the risk and return on a portfolio in a single measure that categories the performance on a risk-adjusted basis. Among the selected schemes ICICI Bank and Axis bank has succeeded in generating excess return respectively.

PARTICULARS	Nifty 50	КОТАК	ICICI	HDFC BANK	HDFC	AXIS
Treynor's Return	-6.77	-4.94	-9.01	-6.15	-5.23	-3.47
Deviation		1.82	-2.24	0.62	1.54	3.30
Over / Under		Over	Under	Over	Over	Over
		2	5	4	3	1

TABLE 7: TREYNOR'S VALUES OF SELECT SCHEMES OF THE NIFTY FINANCIAL SERVICE COMPANIES AND BENCH MARK VALUES

Source: computed from annual reports of the sample units from 2014-15 to 2018-19.

Table 7 furnishes the average values of Treynor's Index for the select schemes and the underlying bench mark index for the study period 2014-2015 to 2018-19. It is astonishing to note from the above table that all the selected schemes of Nifty Financial Service are over performed as compared to bench mark index. Axis Bank has outperformed his counterpart when compare with the Nifty%50. Hence all Schemes have succeeded in generating moderate return in commensurate with their systematic risk (β) as compared to a bench mark index.

PARTICULARS	NIFTY 50	КОТАК	ICICI	HDFC BANK	HDFC	AXIS
Jensens Return	0.99	1.01	0.68	1.34	0.94	0.77
Deviation		0.02	-0.31	0.35	-0.05	-0.22
Over / Under		OVER	UNDER	OVER	UNDER	UNDER
		2	5	1	3	4

TABLE 8: JENSEN'S ALPHA (A) FOR SELECT SCHEMES OF NIFTY FINANCIAL SERVICE COMPANIES

Source: computed from annual reports of the sample units from 2014-15 to 2018-19.

Table 8 furnishes the information about values of alpha (a) for each select scheme for the study period. Jensen's measure attempts to measure the differential return between the actual return earned on a portfolio and the return expected from the portfolio given its level of risk. The CAPM model is used to calculate the expected return on a portfolio and the return expected from the portfolio is a measure of the excess return or differential return that has been earned over and

above what is mandated for its level of systematic risk. The differential return gives an indication of the portfolio manager's predictive ability (or) managerial skills. It is clear from the above table; 2 schemes performed well and generated excess returns as per CAPM model. A Positive alpha implies superior returns due to superior management skills and negative alpha implies inferior management skills as compared to the market. HDFC Bank ranked number one, (1st rank) among the select schemes.

TABLE 9: CAPM FOR SELECT SCHEMES OF NIFTY FINANCIAL SERVICE COMPANIES

Particulars	Nifty 50	КОТАК	ICICI	HDFC BANK	HDFC	AXIS
Capm Return	1.64	2.16	0.30	3.41	1.69	0.68
Deviation		0.53	-1.34	1.77	0.05	-0.96
Over / Under		Over	Under	Over	over	Under
		2	5	1	3	4

Source: computed from annual reports of the sample units from 2014-15 to 2018-19.

The CAPM is a model for pricing an individual security or portfolio. For individual securities, we make use of the security market line (SML) and its relation to expected return and systematic risk (beta) to show how the market must price individual securities in relation to their security risk class. From the above table, the expected return from 3 Index is above and 2 index is below the bench mark index.

		RANKING						
PARAMETER	КОТАК	ICICI	HDFC BANK	HDFC	AXIS			
RETURN	3	5	1	2	4	15		
STANDARD DEVIATION	3	5	1	2	4	15		
BETA	4	1	5	3	2	15		
SHARPE'S	3	1	5	4	2	15		
TREYNOR'S	2	5	4	3	1	15		
JENSENS	2	5	1	3	4	15		
CAPM	2	5	1	3	4	15		
	19	27	18	20	21			
RANK	2	5	1	3	4			

Table 10 : OVERALL RANKING OF SELECTED COMPANIES

Sources : Compiled from other tables

Table 8 indicates the overall ranking of all chosen Nifty financial Service Companies for the study period. From the above table, it is evident that HDFC Bank has placed first position, followed by KOTAK Bank, Housing Development Finance Corporation at the third position; Axis Bank has placed at 4th position. Lastly, placed in 5th position is ICICI Bank. HDFC Bank has dominated the market due to high returns, timely diversification of portfolio, effective asset management skills, better performance and their superior stock selection skill when compared to its counter parts. ICICI Bank Fund managers need to exercise care and caution in developing and implementing strategies to overcome their inferior stock selection.

CONCLUSIONS

Finally, it is summarized that Nifty Financial Service companies are known to offer stable and sustainable returns over a period of time. The performance Evaluation of Nifty Financial Service companies has been evaluated by using parameters like risk returns related analysis. All the Nifty Financial Service companies' funds have succeeded in imitating the performance of the underlying index and registered excessive returns over CNX Nifty Index. All the schemes of Nifty Financial Service companies exhibited higher risk than the bench mark Index and considered aggressive portfolios. All schemes have succeeded in generating excess returns in commensurate with their systematic risk as compared to Bench mark Index. Performance Evaluation of Nifty Financial Service companies revealed that the **HDFC Bank** dominated the market due to high returns, timely diversification of portfolio, superior stock selection and effective asset management skills, ranked number one.

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