



A STUDY ON BETA VALUE OF BANKING SECTOR STOCKS IN NSE NIFTY

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ABSTRACT

Role of banking industry is most significant in the present scenario of demonetisation. In the light of demonetisation, banking transactions have increased and need for best investment avenues are rising. In this occasion Indian stock market is the best place for investing or trading. Here the author tries to analyse the risk in banking shares. Beta expresses the fundamental trade-off between minimizing risk and maximizing return. If the investor is ready to take risk, he should select the beta with higher value. If the investor is risk averse, he should select beta of less than 1. Risk in banking shares are comparatively above average risk. But less riskier shares are also available from banking shares. Long term investment is preferable in the case of shares from banking sector. Short term investors should be careful to select shares of banks with beta value less than 1.

KEYWORDS : Banking Stock, Beta, Risk

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INTRODUCTION

Banking industry is the pillar of Indian economy. RBI is the controller of this industry and role of banking industry is most significant in the present scenario of demonetisation. A strong banking system in a country always protect from economic adversity. In the light of demonetisation, banking transactions have increased and need for best investment avenues are rising. In this occasion, Indian stock market is the best place for investing or. But the volatility of market is high. There is a chance for huge loss rather than profit. The proportion of investors to population in Indian stock market is very low as compared to international market. Beta value is the good indicator to understand risk in the stocks. Beta talks about risk in terms of volatility. RBI has taken various measures to control and smoothen the economy. Both corporate announcement and RBI's announcement related to banks give high in stability in the share prices of banks as compared to other sectors in the stock market. Speculators are more attracted high fluctuating stocks for speculation. So here, we analysed the risk of stocks of banks through beta value.

Risk Concept

Risk is the possibility of loss or probability of loss. In finance, risk is chance of decreasing actual return as compared to expected return. Risk is defined as the variability or fluctuations in return. Two types of risk are systematic risk and unsystematic risk.

Systematic Risk

Systematic risk is risk affected entire system. In this context, the entire system means stock market. Some external factors like changes in economic condition, political situation, sociological changes etc are affecting the stock market. These factors are uncontrollable. Systematic risk again divided into three categories as follows

- Market risk
- Interest rate risk
- Purchasing power risk

Market Risk: - It is the risk due to variations in return from market caused by bullish and bearish trend. With the fluctuations of market, 80 % of the securities price increase or decrease along with stock market indices.

Interest rate risk: - It is occurring due to the fluctuations in the interest rate. It most commonly affected to bond return and cost of borrowing.

Purchasing power risk: - Risk arises from loss of purchasing power of currency. Inflation is the reason for purchasing power risk.

Unsystematic Risk

Unsystematic risk is the risk which is affected only to an industry or firm. This risk rises from financial leverage, managerial inefficiency, technological change in the production process, availability of raw material, changes in consumer preference and labour problem. In simple words, risk due to the influence of internal factors within organisations. Unsystematic risk can be divided as;

- **Business Risk:** Variations in business operating income leads to business risk
- **Financial Risk:** It refers to the difference between Earnings Before Interest and Tax (EBIT) and Earnings Before Tax (EBT).

What is Beta?

Beta is a measure of risk in terms of volatility. It compares the market risk with broader market. It is the slope of the characteristic regression line. It describes the relationship between stocks return and index returns. In other words, beta is a measure of systematic risk of a security or portfolio in comparison to market as whole. It is also known as beta coefficient. Beta gives us the tendency of a security returns to respond to swings in the market.

Interpretation of Beta Value

Beta value 1 indicate that the security's price will move with the market. It means, when the market goes forward, security price also goes forward, and security price goes backwards with decrease in the market index.

Beta value lies between 0 and 1 indicate that the security is less volatile and comparatively less risk. Swings in the market less affected to security price and return is also less than market return.

A beta greater than 1 indicates that security price fluctuations are more than the market fluctuations. This security's return and risk is very high. Return from this security's is higher than during up trending and greater chance to huge loss during down warding market.

Bata value less than 0 means that the prices of securities go down even if the market is up trending. It is also known as decaying security. If beta value is 0, it will not be related to stock market.

Need of the Study

The study was conducted to evaluate the Beta value of the banking stocks. It also evaluates the performance of banking share stock mainly the identification of risk of banking stock based upon beta value. This study is structured to analyse the performance of the selected shares in the banking industry to reveal the risk in a period.

Objectives of the Study

- To analyse the risk of the selected banking shares listed in NSE Nifty.
- To compare short term and long-term beta of selected shares
- To study volatility of banks in comparison with the market.

LITERATURE REVIEW

Dr.S. Poornima and Swathiga studied the relationship between risk and return of selected stocks. The author used CAPM model in this study. Two sectors were analysed and they are automobile sector and IT sector. Their beta values are positive. So, stocks in automobile and IT sectors' risk and return are high.

Mahendar Pavirala studied risk return relationship of IT stocks listed in NSE CNX 100. This study reported that the performances of stock are not consistent and did not offer more than 10% as return. So stocks in IT sector are subjected to high risk.

Shaini Naveen and T. Mallikarjunappa compared risk and return of stocks of CNX Bank Nifty. Beta is the measure of systematic risk and helpful to understand the relationship between stock returns and index returns. This study considered 12 banks included in Bank Nifty. It was found that betavalue of all banks is positive. It was found that, at a particular point of return, different stocks have different degree of risks. So, it is suggested that investors should understand and analyse the market continuously to select the stocks for investing their funds.

Dr.S. Krishnaprabha and Mr. M.Vijayakumar conducted a study on risk and return analysis of selected stocks in India. Five sectors in BSE have been selected for this study. Selected sectors are banking sector, automobile sector, information technology sector, pharmaceutical sector and fast moving consumer goods sector. Investors are interested in reducing risk and maximising return. But, analysis in this study showed that risk and return moved in the same direction. It means when risk increases, return also increases.

Narayan Gaonkar and Dr.Kushalappa analysed risk and return of stocks listed in NSE. Risk and return of stocks are high influential factor in investment decision.

A stock which has more systematic risk is not suitable for investment because that it has highest market risk, which cannot be diversified like unsystematic risk.

Bedanta Bora and Anindita Adhikary studied risk and return relationship. It was found that there is a positive relationship between return from securities and market return. Investor should consider risk and return of securities, while making investment decisions. It is better to consider stocks which are stable in nature to avoid fluctuations in return.

Uday Kumar Jagannathan and N. Suresh analysed major stock indices in India in terms of risk and return. They found that BSE Sensex preferable than BSE small cap in terms of return and coefficient of variations. Diversification across indices would help to get maximum benefit for the investor.

DATA AND METHODOLOGY

The present study is analytical in nature. It is based on secondary data collected from NSE. Among various sectors in NSE, banking sector is selected for the study. 12 shares (which also included in bank Nifty) are selected for analysis. For calculating short term beta, consider 3 months share price of selected stocks for the period of 15th September 2017 to 15th December 2017. For calculating long term beta, consider 4 years share price of selected stocks for the period of 2014 to 2017. Following formula used for calculating beta.

$$\beta = \frac{n\sum XY - (\sum X)(\sum Y)}{n\sum X^2 - \sum(X)^2}$$

RESULT AND DISCUSSIONS

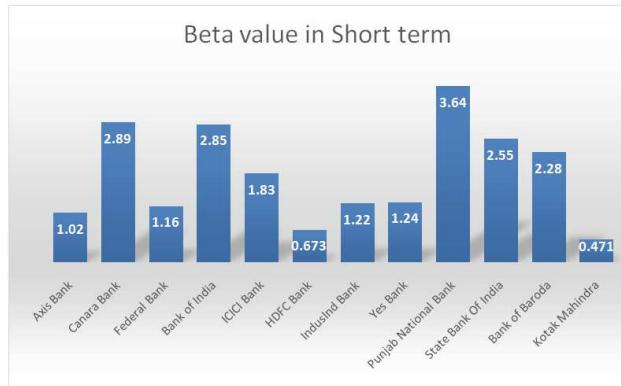
In this session, the author made attempts to analyse the risk and return in terms of beta value. Here, both short term and long-term beta were analysed. Beta value of selected shares are described in the table:1 as follows.

Table:1: Beta Value of Selected Banking Sector Stocks

Bank Name	Beta Value In Short Term	Beta Value in Long Term
Axis Bank	1.02	1.48
Canara Bank	2.89	1.94
Federal Bank	1.16	1.22
Bank of India	2.85	1.97
ICICI Bank	1.83	1.34
HDFC Bank	0.673	0.868
IndusInd Bank	1.22	0.522
Yes Bank	1.24	1.31
Punjab National Bank	3.64	1.81
State Bank Of India	2.55	1.84
Bank of Baroda	2.28	1.43
Kotak Mahindra	0.471	0.961

Source: www.nse.com

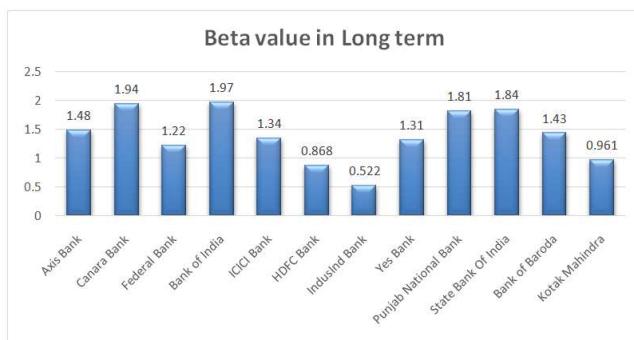
This table shows short term beta value and long-term beta value of selected shares from banking sector. Its graphical representation showed in Figure1 and 2 as follows.



Source: Secondary Data

Figure 1: Short Term Beta of Selected Banking Sector Shares

While considering short term beta value, HDFC bank and Kotak Mahindra has less beta value. Its beta value is less than 1. In short term, Fluctuations of prices of HDFC and Kotak Mahindra banks are less than market fluctuations and return is also less than market return Punjab National Bank shows high beta value and its risk and return is high. Beta value of Canara Bank, Bank of India, SBI and Bank of Baroda are above 2 and they are riskier shares. Axis bank, Federal Bank, ICICI Bank, IndusInd Bank and Yes Bank have short beta between 1 and 2. Its actual returns are more than market return and the loss may be greater than market loss.



Source: secondary data

Figure 2: Long Term Beta of Selected Banking Sector Shares

While considering long term beta value, HDFC bank, IndusInd Bank and Kotak Mahindra have beta value between 0 and 1. In long term, Fluctuations of prices of HDFC, IndusInd Bank and Kotak Mahindra banks are less than market fluctuations and returns are also less than market return. Beta value of Axis bank, Canara Bank, Federal bank, Bank of India, ICICI Bank, Yes Bank, Punjab National Bank, SBI and Bank of Baroda lie between 1 and 2 and they are also riskier shares. It is more volatile than market.

CONCLUSIONS

This study focuses on beta value of selected shares from banking shares listed in NSE. Analysis shows that beta value of banking sector is high. Short term beta is higher than long term beta in most of the cases. In the case of 5 banks (Axis bank, Federal bank, HDFC, Yes Bank and Kotak Mahindra bank), long term beta is higher than short term beta. Beta is a usable measure of risk, it helps the investors to take investment decisions. Firstly, investor should identify the level of risk one can bear. If the investor is ready to take risk, he should select the beta with higher value. If the investor is

risk averse, he should select beta of less than 1. From this, we can understand that risk in banking shares are comparatively above average risk. But, less riskier shares are also available from banking shares. Long term investment is preferable in the case of shares from banking sector. Short term investors should be careful to select shares of banks with beta value less than 1.

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