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RESEARCH ARTICLE

AN ANALYSIS OF RISK AND RETURN IN EQUITY INVESTMENT IN BANKING SECTOR

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ABSTRACT

India is one of the emerging economies, which have witnessed significant development in the stock markets during the liberalization policy initiated by the government. And Indian stock market is largely integrated with the world markets. In that Context financial crisis of 2007-09 was a glass case of large spillovers from one bank to another bank heightening risk. It is clear that the investing in banking shares include high risk at the same time it earns extremely negative return which is revealed by the performance analyses on selected banking shares. Investing in stocks is a risky business. There are some risks which can control over and others that can only guard against. Most of these risks affect the market or the economy and require investors to adjust portfolios or ride out the storm. In this paper author analyze the risk and return in banking equity with non banking equity in Bankex. The study compare the banking equity performance with two major effected sector (Real, IT). The hypothesis taken is there is significant difference in return in banking and non banking equity. The statistical tools which were used for analyzing the hypothesis were descriptive analysis and T-test. The author has given some suggestion to improvise the market condition from the global recession.

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INTRODUCTION

Indian banking industry, the backbone of the country's economy, has always played a positive key role in prevention the economic disaster from reaching horrible volume in the country. Risk is a concept that denotes a potential negative impact to an asset or some characteristic of value that may arise from some present process or future event. it has achieved enormous appreciation for its strength, particularly in the wake of the latest worldwide economic disasters, which pressed its world wide counterparts to the edge of fall down. The Equity market in India is extremely volatile. Equity Markets across the world are volatile but India has a higher level of volatility. Stock market risk is the tendency of stock prices to decrease due to the change in value of the market risk factors. Value of units or shares is directly related to the market value of those investments held by the stock market. Though banking and financial services sector funds have accelerated on generating superior risk adjusted returns until now, they suffer from the risk of portfolio concentration as a single stock accounts for equity portfolio in some gear. The market value of those investments will go up and down depending on the financial performance of the issuers and general economic, political, tax and market conditions. Standard market risk factors are stock prices, interest rates, foreign exchange rates, and commodity prices.

Need of the Study

Banks play an important role in supporting economic growth and it is worth reflecting on the lessons that have been learnt from the global financial crisis ones that have been learnt from the global financial crisis. Banking and financial services sector funds have proved to be more volatile than the pure diversified equity funds which make some of them a high risk proposition. The study was conducted to analyze the sensex movement behavior towards the banking stocks. It also evaluate the performance of banking share stock mainly to Identification of Required Rate of Return And Risk of A Particular Stock Based Upon Different Risk Elements Prevailing In The Market And Other Economic Factors. Equity investment includes high risk at

the same time it earns higher return unusually high returns may not be sustainable. Since the banking industry is under the control of Reserve Bank of India (RBI), it is adversely used as the tool to control the external problems like inflation, interest rate, and money supply. Because of this, there is a high instability in the share price that reduces the real investor's interest. This study is structured to analyse the performance of the selected shares in the banking industry to reveal the risk and return in a particular period of time and the investor's perception towards the Banking industry.

1. Objectives of the study

- To entrap banking sector stocks, the level of expected return and risk in the changing economy. And Analyze the Risk and Return of banking sector Stock with the Bankex index.
- To Test the Variability between Variables, Such as variance of returns co-relations standard deviation.

2. Hypothesis

Based on the above objectives following are the hypotheses formulated to test in this research study.

Ho: = There is no Significant relation of return between banking and Non-banking Equity.

H1:= There is Significant relation of return between Banking and Non-banking Equity.

3. Research Methodology

The present study based on secondary data only. Secondary data are collected from, Bombay stock Exchange. Also the data the gathered will help in identifying key parameters to examine through further exploration and thus will help in defining the Objectives.

Sample Design

The present study is aimed at finding out the randomness in successive share price changes. All 8 Banking Companies listed on the Index, Bankex of the Bombay Stock Exchange are taken for the study. For compare the bank equity two major sector company taken for analysis.

Table 1. Performance Analysis of Bank Share for a Period of Six Month (JULY 2012 TO 31ST DECEMBER 2012)

| | HDFC Bank | Axis Bank | ICICI Bank | SBI | Punjab Bank | Federal bank | Canara Bank | J&K Bank |
|--------------------------------|-----------|-----------|------------|---------|-------------|--------------|-------------|----------|
| RETURN | 18.28% | 31.82% | 27.22% | 9.3% | 15.87% | 18.89% | 25.89% | 29.57% |
| BETA | 0.0055 | 1.3407 | 1.2630 | 1.1485 | 1.1283 | 0.1170 | 1.2081 | 0.4070 |
| $ALPHA(\alpha)$ | 0.0566% | 0.0371% | 0.0158% | 0.0850% | 0.0420% | 0.1347% | 0.0268% | 0.17033% |
| $VARIANCE(\sigma^2)$ | 2.4219% | 7.0372% | 5.2302% | 0.9539% | 2.0147% | 2.8544% | 5.3619% | 6.6028% |
| STANDARD | 1.5562% | 2.6527% | 2.2869% | 0.9766% | 1.4194% | 1.6895% | 2.3155% | 2.5696% |
| DEVIATION(σ) CORRELATION(r) | -0.0068 | -0.3289 | -0.4613 | 65.7907 | -2.0246 | -0.1077 | -0.4264 | -0.1085 |

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Table 1.2. Descriptive statistics of selected banks in Bankex

| BANKS | Mean | Standard deviation | Skewness | Kurtosis | Range |
|---------|------|--------------------|----------|----------|-------|
| HDFC | 0.14 | 0.99 | 0.64 | 0.82 | 5.49 |
| AXIS | 0.23 | 1.81 | 0.83 | 2.72 | 12.60 |
| ICICI | 0.20 | 1.55 | 0.88 | 1.63 | 8.94 |
| SBI | 0.08 | 1.78 | -0.03 | 1.76 | 11.23 |
| CANARA | 0.20 | 3.62 | -0.05 | 22.90 | 44.66 |
| FEDERAL | 0.15 | 1.81 | 0.88 | 3.74 | 13.56 |
| PUNJAB | 0.12 | 2.15 | 1.49 | 11.14 | 20.10 |
| J&K | 0.23 | 2.15 | 1.31 | 6.12 | 16.66 |

Table 1.3. t-test result of J&K bank with Infosys and DLF Ltd

| | J&K | INFOSYS | J&K | DLF | |
|------------------------------|--------|----------|--------|--------|--|
| Mean | 0.23 | 13.10 | 0.23 | 0.13 | |
| Variance | 4.67 | 13195.76 | 4.67 | 5.50 | |
| Observations | 123.00 | 123.00 | 123.00 | 123.00 | |
| Hypothesized Mean Difference | 0.00 | | 0.00 | | |
| Df | 122.00 | 242.00 | | | |
| t Stat | -1.24 | 0.37 | | | |
| $P(T \le t)$ one-tail | 0.11 | 0.35 | | | |
| t Critical one-tail | 1.66 | 1.65 | | | |
| P(T<=t) two-tail | 0.22 | 0.71 | | | |
| t Critical two-tail | 1.98 | 1.97 | | | |

Table 1.4 T-test result of SBI with DLF and Infosys

| | SBI | DLF | SBI | INFOSYS |
|------------------------------|--------|--------|--------|----------|
| Mean | 0.09 | 0.13 | 0.09 | 13.10 |
| Variance | 3.22 | 5.50 | 3.22 | 13195.76 |
| Observations | 123.00 | 123.00 | 123.00 | 123.00 |
| Hypothesized Mean Difference | 0.00 | | 0.00 | |
| Df | 228.00 | | 122.00 | |
| t Stat | -0.14 | | -1.26 | |
| $P(T \le t)$ one-tail | 0.44 | | 0.11 | |
| t Critical one-tail | 1.65 | | 1.66 | |
| $P(T \le t)$ two-tail | 0.89 | | 0.21 | |
| t Critical two-tail | 1.97 | | 1.98 | |

Table 1.5. T-test result of Punjab Bank with DLF and Infosys

| | PUNJAB BANK | DLF | PUNJAB BANK | INFOSYS |
|------------------------------|-------------|--------|-------------|----------|
| Mean | 0.07 | 0.13 | 0.07 | 13.10 |
| Variance | 3.79 | 5.50 | 3.79 | 13195.76 |
| Observations | 123.00 | 123.00 | 123.00 | 123.00 |
| Hypothesized Mean Difference | 0.00 | | 0.00 | |
| Df | 122.00 | | 122.00 | |
| t Stat | -0.90 | | -1.26 | |
| P(T<=t) one-tail | 0.18 | | 0.11 | |
| t Critical one-tail | 1.66 | | 1.66 | |
| P(T<=t) twos-tail | 0.37 | | 0.21 | |
| t Critical two-tail | 1.98 | | 1.98 | |

Statistical Analysis

- Descriptive statistics: To analyze the descriptive statistics the mean value is considered.
- T-test: The T-Test is done to find the significant difference with the 4 companies and the factors. If the T-stat value is

greater than T-critical two tail the null hypothesis is rejected, if it is less there is acceptance of null hypothesis.

The actual return for the period of six months is 31.82 percent in Axis Bank and SBI shows the least return 9.3s%. Beta describes the return

of the individual security in response to unit change in the return of the BANKEX index. Beta indicates that a 1 unit of BANKEX return would result in 0.005 units of HDFC Bank stock return. Alpha indicates that the stock return is independent of the market return. In the above case alpha 0.0566percent which indicates that the stock earned a positive return. The variance is a somewhat abstract measure of the variability in a set of data. The variance is calculated to be highest in 7.0372% in Axis bank. The correlation coefficient can vary between -0.1 and +0.1. The Correlation of the above stock is -0.0068 means the stock and market returns are relatively negative correlated. From the analysis it is known that the share has earned a positive return with little high beta value, which shows the investment earned a positive return in the presence of high risk factor. The Table 1.2 shows that, average return of the equity ranges between "0.01% to 0.23%". J&K and AXIS shows the highest average return of 0.23% and the minimum average return is for ANDHRA bank has the lowest average of 0.01%. Standard deviation of return is highest in CANARA bank with 3.62% and lowest in HDFC with 0.99%. CANARA bank has the highest range of 44.66% which indicates it has more dispersion and HDFC has the lowest range of 5.49 with lower dispersion. The skewnesss of all equity has got positive sign except SBI and CANARA bank positively skewed which indicates values are lying above the mean. CANARA bank and PUNJAB bank has the highest kurtosis of 22.90 and 11.14 respectively, which exhibit high peakedness. The returns on these stocks became increasingly sensitive to factors that influence overall stock market returns. At the same time bank stocks were increasingly insensitive to change in interest rates. While these results add to our knowledge of bank stock risks and

Testing Of Hypothesis

In all samples calculated value (t Stat) is less than the tabulated value (t critical two tail). Hence accept the null hypothesis. Thus, there is no significant relation of return in between the banking and non-banking equity.

Conclusion and Suggestion

The banking industry is having the highest growth opportunity in the near future, since banking plays an important role in the economic development. Indian economy is growing at a constant growth of 9% it is expected that banking will be highest performer in the coming years. Banks performs various roles in the economy; they ameliorate the information problems between investors and borrowers by monitoring the latter and ensuring a proper use of the depositor's funds.

They provide inter temporal smoothing of risk that cannot be diversified at a given point in time as well as insurance to depositors against unexpected consumption shocks. Because of the Maturity mismatch between their assets and liabilities, banks are subject to the possibility of runs and systematic risk. Since equity investment yields high return the investors are suggested to invest regularly and invest for long term to earn maximum returns with minimum risk. Since the Indian economy is growing rapidly there will be a good return in the banking sector investments, so it is suggested to hold the shares for a long term of more than 1 year.

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