

Comparative Study on the volatility of share price of private and public sector Banks in India

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Abstract

Interest in value is a worthwhile occasion to make best return and to fence against the danger of swelling. Financial exchange is the one of the main speculation roads comprises a large number of protections. NSE and BSE are the main stock trades working in India. NSE was the main trade in the nation to give an advanced, completely mechanized screen-based electronic exchanging framework which offered simple exchanging office to the financial specialists spread over the length and broadness of the nation. NSE has a few lists which serve speculators of various areas. Expansive market files like NIFTY 50, NIFTY 100, NIFTY 500, Nifty midcap 50, Nifty midcap 250, and Nifty little cap 100 fill in as a benchmark for estimating the presentation of the stocks or portfolios. NSE claims separate sectoral lists like Nifty Auto, Nifty Bank, Nifty FMCG, and Nifty IT and so forth which uphold financial specialists to comprehend execution of different mechanical areas in the economy. There are 3 records particularly for banking area to be specific, Nifty Bank, Nifty private bank, Nifty PSU Bank for banking organizations. Clever Bank establishes 12 banks, 9 from private and 3 public area banks recorded in NSE, Nifty private bank comprises of 10 private area banks and Nifty PSU bank comprises 12 public area banks recorded in NSE. Determination of protections for speculation is a urgent work which needs top to bottom examination and better mindfulness with respect to share value developments. This investigation expects to comprehend the unpredictability of offer costs of three financial organizations every one of private and public area. As it is a systematic examination, optional information has utilized for the investigation. Instruments utilized for this are rate, Trend lines and Market Indicators. Further the investigation examined the market instability by utilizing mean, standard deviation and relationship utilizing the opening and shutting costs and month to month normal costs. Expanded development in the pace of non-performing resources particularly on account of public area banks built up a negative picture on the essence of banks.

Demonetization declared by the focal Govt. on eighth Nov 2016 brought a major discussion up in the country respects its effect. Various tricks identified with banking area as non-reimbursement of enormous advances by corporate were additionally come into the news after the date of demonetization. In the light of all these, this examination endeavors to look at the exhibition of public area manages an account with private area banks in its stock cost. It examines the presentation of stock costs of banking area organizations and its unpredictability during the most recent one-year time frame begins from first sep 2018 to 31st Aug 2019.

Keywords: Private Bank, Public sector bank, Nifty Bank, Nifty Private Bank

Introduction

In the cutting-edge financial framework banks assume a significant function in Economic turn of events. It has an imperative function in building the financial aspects of a person just as country. Wide spread financial arrangement of India has more noteworthy significance as it shapes the life saver of monetary movement of both provincial and metropolitan zones. The improvement of a country chiefly relies upon the presence of very much created monetary area which upholds Industry, Agriculture, schooling, family unit and so forth by giving advances and propels and other budgetary help. Presence of banks empowers capital arrangement and which creates reserve funds propensities among the general population. Banks are the credit makers. They uphold the country in balancing out the cash flexibly and channelizing the asset to beneficial areas. The Indian Banking industry has added to the monetary development of the nation. This area has gone through huge turns of events and financial specialists trust it as an area having future thriving. Hold Bank of India is the national bank of the nation; it controls the financial business in India and guarantees money related strength in the economy. In India Banks are arranged into various gatherings, for example, planned and unscheduled business banks, public area banks, private banks, unfamiliar banks and agreeable banks. RBI as of late allowed to begin installment banks too in India. Business banks possess lion segment of Indian financial framework which comprises public area and private area banks. The time frame from 1991 onwards wonderful development in the financial area occurred respects to advancement of monetary strategies. According to the Narasimham Committee suggestion RBI allowed passage of private area major parts in Indian Banking framework. At present India has a wide scope of banking area which comprises of 21 public area banks and 20 private area banks. This

investigation endeavors to look at the instability of offer cost of public area keeps money with private area banks.

Review of Literature

¹ **Dr.P. Karthikeyan 2016** examined the behavior of stock price in India. He took the monthly prices of selected companies in constructive industries listed in NSE. He applied simple moving average and trend analysis for the study. He concluded that share price behavior is not trend in nature.

² **M. Prakash 2015** analysis on equity share behavior of selected scrip in banking sectors studied the stock market behavior levels in India from 2014-2015 based on monthly price data on NSE using simple moving average found that share price behavior was low during the study period. So, the study period suggest that the investor should carefully invest in shares.

³ **Dr. Premachandran 2016** examined the key volatility and returns of the Indian banking sectors in India. The study is based upon the stocks comprising the NSE index over a period April 1st 2015 to 30th March 2016. The empirical study is purely secondary in nature where the daily closing prices of stocks of the 12 banks that appear in the bank index is used. The study used standard deviation and beta to investigate the volatility and returns of market share price. The empirical findings show that in share market in high risk because the share more volatile.

⁴ **A. John William & T. Vimala 2014** Conducted a study on equity price volatility of selected private banks in NSE. The study is fully based on the secondary data which have been collected from the NSE websites and money control data base. Today private banks occupy a premier position in the comity of Indian banks. The objective of equity prices and portray the significance of beta value has calculated from 2013 to 2014 of monthly closing prices. To study used following tools to discover the problems they are mean, standard deviation, and beta. The findings of the research reveal that standard deviation equity volatility is comparatively higher during the following month and higher beta value in this study compare to significant values.

⁵ **Raman.KAgrawalla 2014** made an attempt to study the extent in his study, "Share price and macroeconomic variables in India". Bank nifty were covered in this stud. He applied descriptive statistics and correlation matrix for the study. It was found that the macroeconomic variables impact from the share price in market. He concludes that in share price was the highest during the study period.

Statement of The Problem

The private area banks assume an essential function in the Indian economy. They by implication spur the public area banks by offering a sound rivalry to them. In India Banks are arranged into various gatherings, for example, planned and unscheduled business banks, public area banks, private banks, unfamiliar banks and agreeable banks. RBI as of late allowed to begin installment banks too in India. Business banks involve lion part of Indian financial framework which comprises public area and private area banks. The time frame from 1991 onwards noteworthy development in the financial area occurred respects to advancement of monetary approaches. According to the Narasimham Committee suggestion RBI allowed passage of private area major parts in Indian Banking framework. At present India has a wide scope of banking area which comprises of 21 public area banks and 20 private area banks. Demonetization reported by the focal Govt. on 8 Nov 2016 brought a major contention up in the country respects its effect. Various tricks identified with banking area as non-reimbursement of immense credits by corporate were likewise come into the news after the date of demonetization. In the light of all these, an endeavor is made to look at the unpredictability of the offer value developments of three banks every one of private area and public area with that of Nifty Private bank and Nifty PSU Bank through specialized examination.

Objective of the Study

1. To study the volatility of share price movements of selected banking companies.
2. To compare the price movements of private bank with public sector banks.
3. To compare the performance of individual shares with Bank Nifty.
4. To compare the performance of Nifty Private Bank with Nifty PSU bank.

Research Methodology

Three popular banks were selected from Nifty private bank Index and Nifty PSU Bank for the study. Purposive sampling technique is used in this study. The data used in for the study is purely secondary in nature where the daily closing of the NIFTY index and daily closing prices of stock of the banks that appear in the bank index is used. The daily closing prices have been collected from the official website of National stock Exchange (NSE) for the period from 1 stsep 2018 to 31st Aug 2019. For data analysis here the descriptive statistics with regard to daily closing prices average, high and low are used. Volatility is explained using standard deviation

and its coefficient. The NIFTY index returns and each of the bank returns have been correlated to see the relationship.

PERIOD OF STUDY

It intends to do a comparative study on the performance of stock prices of private sector banking companies with public sector banking companies for the last one-year period starts from 1st sep 2018 to 31st Aug 2019.

LIMITATIONS OF THE STUDY

- 1.This investigation is for the most part done dependent on the exhibition 3 private area and 3 public area banks which may be not adequate to sum up entire financial area.
- 2.The study is based on technical analysis and no fundamental factors were considered.
- 3.The period of study restricted for 1st sep 2018 to 31st Aug 2019. which might be not sufficient to predict the future trend of market.

Mean and Standard Deviation

The average and standard deviation of the share prices helps to understand the variability of the share price from its mean price. Daily closing prices of selected shares from 1 Sept 2018 to 1 Aug 2019 are used to find the average and standard deviation.

Name of the Bank	Mean Price	Co-efficient of variation
HDFC	1935.88	7.06
KOTAK BANK	1135.74	12.71
AXIS BANK	539.20	7.10
PNB	124.21	33.98
SBI	280.17	10.57
BANK OF BARODA	147.28	11.32

Table 1: Average price and coefficient of variation

Interpretation

Table 1 shows the average price and the dispersion of all the 6 selected shares for the period of Sep 2018 to Aug 2019. As per the figures listed above Punjab National bank shows the highest degree of volatility of 33.98%. HDFC bank keeps the least volatility of 7.06% among the 6 selected banks.

A. Analysis of growth in the share prices

The study period ranges from 1 Sept 2018 to 31st Aug 2019. Share prices of selected banks on the first day of Sept 2018 and current price (31st Aug 2019) were taken to find the changes happened.

Name of the Bank	Price on 1-09-2018	Price on 31-08-2019	Change in value	% change
HDFC	1867	2061	194	10.39
KOTAKBANK	994	1287	293	29.48
AXISBANK	508.55	649	140.45	27.61
PNB	144.45	88.15	-56.3	-38.98
SBIN	273	309	36	13.18
BANKBARODA	133	152	19	14.28

Table 4: Changes in the price of shares during the study period

B. Correlation

Correlation analysis is used to measure the degree of relationship between two continuous variables. If there is any correlation between two variables that means both the variables moves in a systematic order.

1. Correlation with Nifty 50 and Nifty Bank Index

Correlation between share price movements of all the selected shares with Nifty 50 Index and Nifty Bank Index is shown in table 2.

Table 2: Correlation with Bank Nifty

Name of the Bank	Correlation with Nifty 50	Correlation with Nifty Bank
HDFC	0.896342	0.920157
KOTAK BANK	0.835116	0.825217
AXIS BANK	0.872274	0.859941
PNB	-0.49182	-0.38601
SBI	0.430843	0.429387
BANK OF BARODA	0.065927	0.075777

Interpretation

Table 2 shows correlation statistics of the monthly closing price of the individual stocks of banks with Nifty 50 Index and Nifty Bank Index. Stocks of all the private sector banks viz. HDFC Bank, Kotak Mahindra Bank and Axis Bank were positively correlated to the Nifty 50 and Bank Nifty Index. From the table it is clear that HDFC Bank has highest correlation (Positive) with Nifty 50 and Bank Nifty index among selected 6 banks. Other bank such as Kotak Mahindra Bank and Axis bank have higher correlation with a point of +0.87 and +0.850 respectively. A public sector bank shows a less correlation with both indexes. State Bank India has the highest correlation with nifty indices among public sector banks. Punjab national bank shows a negative relation with both the indices under consideration.

2. Correlation of Public sector banks with Nifty PSU Bank Index

In this study considered the three banks from public sector. State bank of India, Punjab National Bank and Bank of Baroda are the public sector banks. Table 3 shows the correlation of public sector banks with Nifty PSU Index.

Table 3: Correlation of Public sector banks with Nifty PSU Bank Index

Name of the Bank	Correlation with Nifty PSU Bank
Punjab National Bank	0.787839
State Bank of India	0.82011
Bank of Baroda	075646

Interpretation

All the public sector banks keep a positive correlation in its share price movement with Nifty PSU Bank Index. State Bank of India has the highest correlation of 0.82 followed by Punjab National Bank of 0.7878.

3. Correlation of private sector banks with Nifty Private Bank index

HDFC Bank, Kotak Mahindra Bank and Axis Bank is the private sector bank considered here in this study. Correlation of share price movement of these banks with the Nifty Private Bank Index for the last one-year period is shown in the table -4

Table 4: Correlation of private sector banks with Nifty private Bank Index

Name of the Bank	Correlation with Nifty Private Bank
HDFC Bank	0.769137
Kotak Mahindra Bank	0.821979
Axis Bank	0.807725

Interpretation

It is clear from the table that all the private sector banks keep a positive correlation with Nifty Private Bank Index. HDFC bank has the highest correlation of 0.769 followed by Kotak Mahindra Bank of 0.8219. Axis bank has correlation of 0.8077.

4. Correlation of Banking sectoral Indices with Nifty 50 Index

NSE has three indices related with banking companies. Nifty Bank Index represent entire banking sector whether public or private. Nifty PSU Bank index is another which represents only the public sector banks listed in NSE. Thirdly Nifty Private Bank Index representing private sector banks listed with NSE. Here this study tries to correlate the movement of these three indices with the Nifty 50 index.

Table 5: Correlation of sector indices with Nifty 50 Index

Name of the Index	Correlation with Nifty 50
Nifty Bank	0.957532183
Nifty Private Bank Index	0.964006231
Nifty PSU Bank Index	-0.013418308

Interpretation

From the table 5 it is clear that Nifty Bank index and Nifty Private Bank index have high positive correlation of 0.957 and 0.964 respectively with NIFTY. While Nifty PSU Bank Index shows a negative correlation of -0.013 with Nifty 50 index. From this it is clear that private

banks move in the same direction of overall Indian economy whereas public sector banking companies follows an opposite direction, that is a downward movement.

Findings and Conclusions

Financial exchange by and large considered as exceptionally unstable and its unpredictability is taken as the key models while settling on venture choices. In Indian economy, banking area organizations holds a decent situation in the financial specialists mind while choosing stock for speculation. This investigation endeavored to gauge the unpredictability of chose organizations from banking area. Assessment of unpredictability helps in valuing of protections and speculation choices. It likewise indents to analyze the instability and patterns of public area saves money with private area banks.

1. All the private area banks show higher pace of development when contrast with public area bank. Kotak Mahindra Bank has a development pace of 29.48, firmly followed by Axis bank 27.61. HDFC bank likewise shows a development pace of 10.39 in the stock cost during the most recent one year. Simultaneously state bank of India and Bank of Baroda made a development of 13% and 14% individually. Punjab public bank recorded lost - 38% in its offer cost.

2. Stock costs public area banks are more unstable than private area banks. Punjab National Bank shows the most elevated instability of 33.98% and HDFC Bank shows least unpredictability of 7.06%.

3. All the private area banks show high certain connection to the Nifty 50 and Nifty Bank when analyzes to public area banks. Punjab public bank shows a negative connection, Bank of Baroda shows no relationship and State bank of India just shows a relationship of 0.430 and 0.429 with Nifty 50 and Nifty bank.

4. All the public area banks show high certain relationship with Nifty PSU Bank list.

5. All private area banks show high sure connection with Nifty Private Bank Index.

6. When contrasting bank files and Nifty 50, it is discovered that Nifty bank and Nifty Private Bank Indices moves alongside significant file NIFTY. Both show a positive connection of 0.957 and 0.964 separately. However, Nifty PSU Bank list recorded a negative relationship of 0.013%.

7. While thinking about the connection, level of development and instability plainly all the record.

Conclusion

Financial exchange is the one of the speculation roads which offers greatest get back with higher pace of danger. Instability of the stock cost chooses the level of danger and return one speculator can procure from securities exchange. Along these lines, data respects to the stock value instability causes the speculator to settle on best venture choices. Here this examination endeavors to analyze the instability of the public area keeps money with the unpredictability of private area banks. three private area banks keep a positive course than the public area banks.

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