

# Dimensional Study on Share Price Volatility of Banking Sector Listed in NSE

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**Abstract:** Banking plays a vital role in building the economics of an individual as well as nation. In India banking sectors has greater importance as its forms the lifetime of economic activity of rural and urban areas. So the change in stock price movements and volatility of banks will be influencing the individual as well as nation, further the study analyzed a group of select banks and its market volatility is analyzed by using beta calculation, mean, median, mode, standard deviation, skewness, kurtosis, jarquebera is used to value the indicator and quite prominently used by investor while investing. There are also few problems that happens in the banks which has been discussed as statement of problem here as the stock price keeps on fluctuating and as there is a movement in stock market equity these two creates a impact on the firm's financial growth as the growth is not constant. Volatility in the stock market is arguably one of the most misunderstood concept, during the study there was a high volatility. In the stock market private sectors equities have a different face over the public limited firms

**Keywords:** Banking, Movements, Stock market, volatility. JEL Classification: JEL: E3, JEL: E2, JEL: E37

## 1. Introduction

A stock market (also known as an equity market or share market), is a collection of buyers and sellers of the stock. These stocks represent ownership held in companies. These may include publicly or privately traded securities. Usually, large companies will list their stock on a stock exchange because it makes their shares more liquid (i.e., easy to buy and sell), which investors will like, this liquidity as it also attracts international investors. The stock market plays an important role in allocation of resources, which is done both directly as a source of fund and as determinant of firm's value and borrowing capacity. There was a large swing in equity price of the share market in the several countries during the 1980s and it is replenish with additional evidence that the market valuation were more variable than the earning prospects of the both public banks and private banks. The empirical evidence has also constructed some doubts about whether the market equity are efficient in the sense of appropriately it reflect the appurtenant and reachable information. The secondary market in the stock exchange is highly organized market for the purchase and sale of second hand quoted of listed securities. The securities contract regulation act 1956 defines stock exchange as an "association, organization, or not, established for the purpose of assisting, regulating, and controlling, business in buying,

selling, dealing and securities. NSE matters much as important in stock market.

The National Stock Exchange(NSE) is India's leading stock exchange that covers various cities and towns across the country. NSE was set up by an leading institutions to provide a modern, fully automated screen-based trading system with national reach. The exchange has fetched unparalleled transparency, speed & efficiency, safety and market integrity. It has set up facilities that serve as a model for the securities industry in terms of system, practices and procedures. A major concentration has been paid for stock market on banking sector. Banking sectors also play an vital role in share market as well as the economic development of a company. A reinforced banking industry is momentous every country and can have a significant affect in supporting economic development through efficient financial services. After liberalization the banking industry in India has under gone major modulation. There are many investors who invest large amount of money in banking sector of share market. The present study examines the share price volatility in private sector banks in India listed in NSE.

Profile of the concern is the private sectors banks in India represents part of the Indian banking sectors that is made up of private and public sectors banks. The public sectors banks like SBI, Bank of Baroda and Punjab National Bank in India have made significant contribution to almost all the sectors of the Indian economy such as agriculture, industries, trade and employment and infrastructure (PBS'S) provide moderate rate of interest and deposits and low rate of interest on loan provided. Private sector banks like HDFC, ICICI, Kotak Mahindra Bank provide various benefits and schemes to the public. Among these banks only two private banks under NSE is chosen for the study. These private sectors banks are under the control of RBI which runs under its regulation; the flow of money is controlled by RBI. Private sectors shares or equity is not held by the government but by private shareholders. Private sectors banks provide more rate of interest to the deposits and more rate of interest for the loan provided.

## 2. Review of literature

<sup>1</sup> Karthikeyan.p(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.

<sup>2</sup>Prakash.M(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.

<sup>3</sup>Premachandran(2016) Examined the key volatility and returns of the Indian banking sectors in India. The study is based upon the stocks compromising 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.

<sup>4</sup>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 occupies 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 reveals that standard deviation equity volatility is comparatively higher during the following month and higher beta value in this study compare to significant values.

<sup>5</sup>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. The present study re-visits the existing postulates on determination of share prices and volatility of private banking sectors in India listed in NSE during the period 2017-2018.

### 3. Statement of the problem

- High volatility during the period of September - November
- Beta value changes to day.
- Private sector banks have different face over public limited firms.

### 4. Objectives of the study

- To determine the volatility of share price of private sectors banks listed in NSE.
- To analyze and forecast the share price movements of

private sectors banks listed in NSE.

### 5. Scope of the study

The present study empirically explore share price movement and its volatility of the banking sectors. The study intended to cover the experiences of 2 scripts which were actively traded in the NSE. The sectors selected based on market capitalization of the shares of private sector banks in NSE.

### 6. Research methodology

#### A. Empirical research design

##### 1) Data used

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 2 banks that appear in the bank index have been used. The daily closing prices have been collected from the official website of national stock exchange for a period of one year from January 2018 to December 2018

##### 2) Methods of sampling

Private banking companies are selected for the study. The selection is based on mostly traded in NSE. Bank and availability of data, purposive sampling technique is used in study. Top two Private Banks mostly traded in NSE. Banks are

S. No.	Name of the bank
1.	HDFC bank
2.	ICICI

### 7. Analyses and interpretation

The beta ( $\beta$ ) of an investment security (i.e. stock) is measurement of its volatility of returns relative to the entire market. It is used as measure of risk and is an integral part of the capital asset pricing model. A company with higher beta has greater risk and also greater expected returns.

The beta coefficient can be interpreted as follows:

$\beta = 1$  exactly as volatile as the market

$\beta > 1$  more volatile than the market

$\beta < 1$  less volatile than the market

$\beta =$  or  $< 0$  negatively correlated or uncorrelated to the market.

Beta is calculated by

$Beta(\beta) = p1/p2 - 1$

$Beta(\beta) = (\text{slope } y \text{ known, } x \text{ known})$

The two table shown above shows the beta calculation which determine the volatility of the share price .The data of two different banks was collected and analyzed ,it conclude that

Table 1

Descriptive statistics of share price of two Banks

Year	bank	Calculation of Beta	Coefficient of Beta
2018	HDFC	140.72	>1 More volatile
2018	ICICI	0.9036	<1 Less volatile

when the beta value is greater than 1 there is more risk and the investor is advised not to buy or sell the share. Likewise when the value is lesser than 1 there is less risk and the investor can buy and sell the shares that will tend to earn good profit. The study made concludes that compare to HDFC bank ICICI bank

has less risk with more growth so the future investors can opt ICICI bank for investment process and profit maximization.

Chart 1 Descriptive statistics of share price two Banks

Table 2  
Descriptive statistics of share price of HDFC

Summary of statistics	Share price of HDFC	Share price of ICICI
Mean	1763.92	296.94
Median	1802.52	295.92
Minimum	2005.70	362.30
Maximum	1432.35	244.23
Standard Deviation	131.54	23.14
Skewness	-0.86	0.13
Kurtosis	3.014	3.31
JarqueBera	30.96	1.76
Probability	0.00	0.41

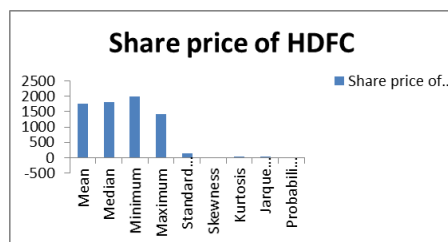


Fig. 1. Share price of HDFC

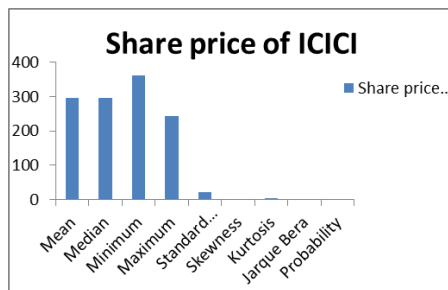


Fig. 2. Share price of ICICI

- Table 1 descriptive statistics of share price for the period of January 2018 to December 2018. It explains that the mean value of share price of HDFC Bank is 1763.92 and its standard deviation is 131.54 which imply that there is low degree of variability due to less deviation .It means that the mean value is distributed normally. The mean distribution of share price of HDFC Bank is negatively skewed (-0.43) that indicated the distribution towards the left tailed. Kurtosis is distributed is leptokurtic(3.01) (J-B) test statistics (0.00) is significant and it shows that skewness and kurtosis are not normally distributed in share price of HDFC Bank and
- ICICI bank estimate statistics of share price changes. It explains that the mean value of share price of ICICI Bank is 296.94 and its standard deviation is 23.14 which imply that there is low degree variability due to less deviation. It means that the mean value is distributed normally. The mean distribution of share price of ICICI Bank is positively skewed (0.12) that

indicates the distribution towards the right tailed. (J-B) test statistics (1.76) is significant. ICICI Bank shows good share price movement and distribution compare to HDFC.

### 8. Limitations of the study

- This study is limited to some selected stocks of private banking sectors under NSE.
- The study is based on the secondary data taken from the money control, NIFTY index data base of selected NSE listed banking sectors depend entirely on the accuracy of such data.

### 9. Suggestion

- The investors in the equity have to find out the draw backs of market fluctuation over a period of time, which will strengthen their investment decision.
- The study observed that the investment strategy equity is high risk then and nowso mean, standard deviation, skewness, kurtosis, jarque-bera. Value will provide a pathway to choose the best equity.
- Volatility of market should be determined by the investors.

### 10. Conclusion

Banking in India has been vast functioning enterprise even when the rest of the world facing turmoil of depression. The reign of financial period made some notifiable alteration in the banking sector of the economy. The alterations were both favorable and unfavorable to the sector. Such sectors works for the development of economy on all phases. Thus, the earning capacity of each and every banks be made visible in order to make investors attain market knowledge. The study is such an attempt, to examine the volatility of selected private banking sectors listed in NSE for providing valuable information to investors to succeed.

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