

# Comparative Analysis Of Share Price Movements Of Public And Private Sector Banks In India

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**Abstract-** This study focuses on the comparative analysis of share price movements between selected public and private sector banks in India during the period from January 1, 2025, to June 30, 2025. The research examines the market behavior and risk patterns of four major banks: State Bank of India (SBI) and Bank of Baroda (BOB) representing the public sector, and HDFC Bank and ICICI Bank representing the private sector. Investors often face difficulty in deciding which category of banks provides better returns with acceptable risk levels. To address this, the study is based entirely on secondary data and applies a set of technical analysis tools that are widely recognized for evaluating stock price behavior. These tools include a 5-day Moving Average, Relative Strength Index (RSI), Rate of Change (ROC), Beta ( $\beta$ ), and Standard Deviation ( $\sigma$ ). The findings are intended to guide investors and analysts in making informed decisions by revealing patterns and differences in price movements and risk profiles.

**Keywords-** Share Price Movements, Public Sector Banks, Private Sector Banks, Technical Analysis, Moving Average, Relative Strength Index (RSI), Rate of Change (ROC), Beta, SD

## I. INTRODUCTION

The banking sector forms the backbone of the Indian financial system, playing a pivotal role in driving economic growth and stability. The strength and efficiency of the banking sector have a direct impact on the performance of the capital markets and the flow of credit in the economy. Banks in India are broadly classified into public sector banks and private sector banks.

Public sector banks (PSBs), which are majority-owned by the Government of India, enjoy a high degree of trust and stability due to government backing. They have extensive branch networks and are often entrusted with the implementation of government policies. However, these banks sometimes face challenges such as higher non-performing assets and bureaucratic decision-making processes.

Private sector banks, in contrast, are owned and managed by private shareholders and are known for their

competitive strategies, technological innovation, and customer-centric services. They often demonstrate strong financial performance and higher profitability ratios compared to some of their public sector counterparts.

Since banking stocks form a significant component of major Indian indices like the NIFTY 50, their performance often influences the overall market direction. The movement of these stock prices is influenced by a wide range of factors, including changes in interest rates, monetary policy decisions, global economic events, and company-specific factors like asset quality and earnings growth.

### 1.1 Statement of the Problem

Investors often find it difficult to decide whether public sector banks or private sector banks provide better returns with lower risk, as stock price movements vary due to different market and operational factors. There is limited comparative research using technical indicators to analyze price behavior and volatility between these sectors. Therefore, this study compares the share price movements of selected public and private sector banks using tools such as Moving Average, RSI, ROC, Standard Deviation, and Beta to understand performance and risk during the period January to June 2025.

### Objectives of the Study

Theres each aims to fulfill the following specific objectives:

- To study the share price movements of selected public and private sector banks.
- To compare the price trends between public and private sector banks.
- To predict the future price movements of the selected banks and assess the level of risk involved in these bank stocks.

## II. REVIEW OF LITERATURE

### 2.1 Gupta and Arora (2021)

investigated the role of Beta in determining the market risk of Indian banking stocks using historical price data. Their findings revealed that private sector banks generally recorded Beta values above 1, suggesting higher volatility and stronger reactions to market fluctuations. Public sector banks, meanwhile, reported Beta values closer to 1, indicating comparatively stable movement. The study concluded that private bank stocks are better suited for aggressive investors, while public banks appeal to risk-averse investors.

## 2.2 Prasad and Verma (2021)

analyzed the relationship between trading volume and stock price volatility in the Indian banking sector. The results indicated a strong positive correlation between trading activity and price fluctuations, especially in private banks, where high trading volume preceded sharp price movements. Public banks showed weaker responsiveness to volume changes, demonstrating steadier trends. The study emphasized the value of technical indicators for identifying short-term market behaviour.

## 2.3 Agarwal (2018)

conducted a comparative study of Nifty Bank index constituents to understand market influence and volatility contributions. The findings revealed that private sector banks significantly contributed to index volatility due to higher liquidity and investor speculation. In contrast, public sector banks played a stabilizing role, supporting index balance during uncertain market periods. The study identified moving average crossovers as useful tools for generating buy and sell signals for traders.

## 2.4 Rao and Kumar (2018)

examined share price volatility and risk–return trade-off among public and private sector banks listed on the NSE. Their research concluded that private banks delivered higher returns but also carried higher levels of risk compared to public banks. The study used standard deviation and Beta to measure volatility and found noticeable differences in investor behaviour across the two categories. They recommended diversification across bank types to minimize portfolio risk.

## III. Research Methodology

### Research Design

The present study adopts a **Descriptive and Analytical Research Design**, as it aims to describe and

analyze the existing share price movement trends of selected public and private sector banks in India. This design is appropriate because the study is based on historical stock price data and focuses on examining actual market behaviour rather than conducting experimental or predictive analysis. The research analyzes the stock performance of four selected banks — **State Bank of India (SBI) and Bank of Baroda (BOB)** from the public sector, and **HDFC Bank and ICICI Bank** from the private sector — over a **six-month period from January 2025 to June 2025**.

The descriptive approach helps in presenting a factual comparison of price fluctuations and market trends between the two bank groups, while the analytical component aids in evaluating risk and return behaviour using technical indicators such as **Moving Average (MA), Relative Strength Index (RSI), Rate of Change (ROC), Standard Deviation ( $\sigma$ ), and Beta ( $\beta$ )**. This methodology enables a systematic understanding of stock price patterns and assists investors in assessing the volatility and performance differences under similar market conditions.

### 3.2 Data Collection

The research is entirely based on **secondary data**, which has been collected from reliable and authentic financial sources. The major sources include the **National Stock Exchange (NSE) official website, Investing.com, and Screener.in**, providing daily closing prices of the selected banks and Nifty 50 index values for the period **January 2025 to June 2025**. Additional references were taken from **journals, research publications, financial news portals, and market analysis reports** to support the literature review and analytical interpretation.

The data collected include **daily stock price movements, market index values, volatility indicators, and technical analysis parameters** relevant to Moving Average, Relative Strength Index (RSI), Rate of Change (ROC), Standard Deviation ( $\sigma$ ), and Beta ( $\beta$ ). All collected data were carefully compiled, verified, and systematically arranged in Microsoft Excel for accurate computation and further analysis.

### 3.3 Analytical Tools Used

To fulfill the research objectives and derive meaningful insights, the following technical analysis tools and techniques were employed:

**Moving Average (MA):** Used to observe the short-term price trend of bank stocks by smoothing daily price fluctuations and identifying upward or downward momentum.

**Relative Strength Index (RSI):** Applied to analyze the speed and magnitude of price changes, helping to determine overbought or oversold market conditions and potential reversal signals.

**Rate of Change (ROC):** Utilized to measure the percentage change in price between the current value and a previous period, indicating momentum strength and direction.

**Standard Deviation ( $\sigma$ ):** Used to evaluate the volatility of stock price returns, where higher values indicate greater risk and instability in price movement.

**Beta ( $\beta$ ) Analysis:** Conducted to determine the stock's sensitivity to overall market movement (Nifty 50), helping measure systematic risk and market dependency.

**Graphical Presentation:** Tables and charts were incorporated to visually represent price movements, comparisons, volatility behaviour, and indicator results for easier interpretation and analysis.

#### IV. DATA ANALYSIS AND FINDINGS

##### 4.1 Table 1. Summary of Technical Indicator Performance (Jan–June 2025)

bank	Trend	RSI	ROC	Volatility	Beta
SBI	Stable ?	Neutral	Mixed	Medium	~1
BOB	Recovery ?	Neutral	Positive	Medium	Low
HDFC	Strong ?	Overbought	Strong +	High	High
ICICI	Fall ?	Oversold	Negative	Med-High	High

##### 4.2 Findings from MA

The Moving Average results show that HDFC Bank had the strongest upward trend, **indicating strong investor confidence**. SBI and BOB reflected stable upward movement, **suggesting consistent performance**. ICICI Bank showed a downward trend **for most of the period, indicating weaker momentum**.

##### 4.3 Findings from RSI

The RSI analysis shows HDFC Bank frequently reached overbought levels, **reflecting heavy buying interest**. SBI and BOB mostly stayed in the neutral range, **indicating balanced trading activity**. ICICI Bank entered oversold positions, **signalling selling pressure and weak demand**.

##### 4.4 Findings from Rate of Change

ROC values indicate strong positive momentum in HDFC Bank, **confirming active performance**. SBI and BOB showed mixed ROC movements, **combining both gains and reversals**. ICICI Bank recorded negative ROC for longer periods, **showing declining momentum**.

##### 4.5 Findings from Standard Deviation

HDFC Bank showed the highest volatility, **indicating higher price fluctuations and risk**. SBI and BOB displayed medium volatility, **making them relatively stable**. ICICI Bank recorded medium-high volatility, **especially during the declining phase**.

##### 4.6 Findings from Beta Analysis

HDFC and ICICI had Beta values above 1, **proving high sensitivity to market movements**. SBI maintained a Beta around 1, **indicating average market influence**. BOB recorded the lowest Beta, **showing lower risk and stable behaviour**.

##### 4.7 Trend Analysis

Private sector banks, mainly HDFC, showed **stronger momentum and higher risk**. Public sector banks offered more stable growth with lower volatility. ICICI Bank underperformed, **while BOB recovered steadily during the study period**.

##### 4.8 Statistical Analysis

The statistical analysis utilizing Beta and Standard Deviation revealed significant differences in risk and volatility among the four banks. HDFC and ICICI recorded Beta values above 1, indicating high sensitivity to market fluctuations, while BOB displayed the lowest Beta, showing lower systematic risk. Standard Deviation indicated that HDFC experienced the highest volatility, whereas SBI and BOB showed moderate volatility, making them relatively stable investment options. Overall, results confirm that private sector banks carry higher return potential with greater market risk,

whereas public banks offer stability with comparatively lower volatility.

### 5.1 Conclusion

The study concludes that there is a clear difference in share price behaviour between public and private sector banks in India. **Private banks such as HDFC and ICICI demonstrated stronger momentum and higher return potential**, supported by positive price trends and higher Beta values, indicating greater market responsiveness. In contrast, **public banks like SBI and BOB showed moderate growth with lower volatility**, making them comparatively stable investment options for risk-averse investors. Overall, the application of technical indicators (MA, RSI, ROC, Standard Deviation, and Beta) effectively highlighted the performance variations across bank categories. The results suggest that **investors seeking high growth may prefer private banks**, while **those prioritizing safety and stability may choose public banks**. The comparative insights gained from this study support informed investment decision-making within the Indian banking sector.

### 5.2 Recommendations

Based on the results of the study, the following recommendations are proposed to support better investment decisions and strengthen market performance evaluation:

1. **Adopt a Balanced Investment Strategy:** Investors should diversify portfolios by combining public sector banks for stability and private sector banks for higher return potential, depending on their risk tolerance.
2. **Use Technical Indicators for Timing Decisions:** Tools such as MA, RSI, and ROC should be used regularly by traders and analysts to identify price trends and reversal signals, improving buy and sell timing.
3. **Monitor Volatility and Risk Levels:** Since HDFC and ICICI exhibit higher volatility and Beta, investors must assess market conditions closely before making high-risk entries, especially during uncertain market periods.
4. **Focus on Long-Term Stability in Public Banks:** Public banks like SBI and BOB can be recommended for risk-averse investors seeking steady performance with moderate volatility.
5. **Continuous Market Tracking:** Regular observation of market movement and global economic factors can help predict price changes more accurately, especially in private banking stocks sensitive to market fluctuations.

6. **Encourage Further Empirical Analysis:** Future researchers and students are encouraged to extend the study period or include additional indicators like MACD and Bollinger Bands for deeper insight.

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