

Riding The Waves: ICICI Bank Stock Price Behaviour in a Transforming Indian Market



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RIDING THE WAVES: ICICI BANK STOCK PRICE BEHAVIOUR IN A TRANSFORMING INDIAN MARKET

A Research Monograph

By

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FOREWORD

I am pleased to present this book, which serves as a significant outcome of the workshop conducted by the PG Department of Commerce on “*Secondary Data and AI-Assisted Research Tools*.” This publication reflects the department’s commitment to strengthening the research culture of the institution by embracing modern analytical techniques and technological advancements.

The initiative taken by the Commerce Department is highly commendable. By integrating artificial intelligence into academic research practices, the department has set an excellent example for others to follow. This book stands as a model that can inspire all departments to adopt similar innovative strategies to enhance the quality and visibility of their academic output.

This publication forms an important part of the department’s ongoing research initiatives, aimed at promoting a structured and progressive approach to academic inquiry. It also opens the possibility for annual publications of PG and UG research works, thereby creating a continuous and sustainable platform for scholarly contributions from the department. In the future, the department hopes and aspires to bring out

many more such publications, further strengthening its academic and research footprint.

I congratulate the PG Department of Commerce for its vision, dedication, and academic leadership. I am confident that this book will serve as a valuable reference for researchers, faculty members, and all those interested in quality-driven academic work.

Dr. M V Georgekutty

Principal, Christ College

PREFACE

This book presents an in-depth analytical study on the stock price behavior of ICICI Bank Ltd. over a ten-year period from May 2015 to May 2025. The work offers a comprehensive examination of market trends, volatility patterns, and trading dynamics using monthly secondary data. Employing descriptive statistics, time-series visualisation, correlation analysis, and non-parametric techniques, the study evaluates the central tendency, dispersion, long-term movement, and the relationship between price levels and trading turnover. The findings highlight significant variability in stock prices, consistent upward price trends, intraday volatility reflected through the consistent difference between high and close prices, and a strong inverse association between price levels and trading volume. Through these insights, the book contributes meaningfully to academic literature in finance and serves as a practical reference for analysts, researchers, and academicians interested in understanding stock market behaviour within the Indian context.

The relevance of this study lies in its systematic and data-driven approach, supported by the integration of AI-assisted tools that enhance the precision and depth

of analysis. By focusing on one of India's leading banking institutions, the book provides a model framework for conducting stock market research using secondary data and modern analytical methods. It is hoped that this work encourages a more evidence-based approach to financial studies and inspires similar research initiatives in the future.

I place on record my sincere gratitude to Dr. Bobby Thomas, Assistant Professor, PG and Research Department of Commerce, Pavanatma College, Murickassery, Idukki, for his unwavering support, scholarly guidance, and encouragement throughout the writing of this book. His mentorship has been instrumental in shaping the clarity, quality, and academic rigour of this work. I also acknowledge that this publication is an outcome of the workshop on *“Secondary Data and AI-Assisted Research Tools”* conducted by the PG Department of Commerce, which provided the conceptual direction and motivation for undertaking this study.

Anitta Thomas

ABSTRACT

This study examines the stock price behaviour of ICICI Bank Ltd. over a ten-year period from May 2015 to May 2025 using monthly secondary data. The analysis aims to understand the central tendency, variability, long-term price trends, intraday price differences, and the relationship between stock prices and trading turnover. Descriptive statistics revealed significant dispersion in price levels, with right-skewed and platykurtic distributions, while trading volume displayed high variability and leptokurtic behaviour. Time-series analysis indicated a strong long-term upward trend with short-term fluctuations, including a notable decline during the COVID-19 period followed by a robust recovery. The Sign Test confirmed that monthly high prices consistently exceeded closing prices, highlighting persistent intraday volatility. Correlation and Spearman's rank analyses showed strong positive relationships among price variables and a significant negative association between price levels and trading volume, indicating higher investor activity at lower price points.

Chapter I

INTRODUCTION AND FRAMEWORK

1.1 Introduction to Financial Markets

The Indian stock market, particularly represented by the BSE Sensex (Bombay Stock Exchange Sensitive Index), serves as a key barometer of the country's economic and market performance. The Sensex comprises 30 financially sound and well-established companies listed on the BSE, representing various industrial sectors of the Indian economy. These companies are selected based on criteria such as market capitalization, liquidity, sectorial representation, and trading frequency. The composition of the Sensex is reviewed semi-annually (in June and December) by the BSE Index Committee, and changes are made to ensure the index remains reflective of current market conditions and economic trends. This dynamic selection process ensures that the Sensex continues to represent the leading sectors and top-performing companies in India.

1.2 Company profile

ICICI Bank Limited, a key constituent of the BSE Sensex, is one of India's leading private sector banks, headquartered in Mumbai. Established in 1994, the bank offers a wide range of financial products and services, including retail and corporate banking, investment banking, asset management, and insurance. With a robust domestic presence and international operations, ICICI Bank is known for its innovation in digital banking and strong financial performance. Its inclusion in the Sensex reflects its significant market capitalization, high liquidity, and vital role in the Indian financial sector.

1.3 Need of the study

The need to analyse the stock price behavior of ICICI Bank arises from its prominent position in the Indian financial sector and its influence on market indices like the BSE Sensex. As a leading private sector bank, its stock performance reflects not only the company's financial health but also broader economic trends and investor sentiment.

Studying its price movements over time helps in understanding market dynamics, assessing risk and return patterns, and making informed investment decisions. Such analysis is particularly valuable for investors, analysts, and policymakers aiming to gauge the stability and growth potential of the banking sector.

1.4 Objectives of the study

1. To describe the central tendency and dispersion characteristics of stock prices.
2. To analyze the monthly price movements of over a 10 year period.
3. To test whether the monthly high prices of the stock are consistently greater than the closing prices.
4. To examine the relationship between monthly stock prices and number of shares traded.

1.5 Research Questions

1. What do the descriptive statistics indicate about the average level, variability, and

distribution of monthly stock prices during the 10-year period?

2. What trends and fluctuations are observed in the monthly stock price movements over the study period?
3. Is there a directional difference between the monthly high prices and closing prices of the stock over the study period?
4. Is there a statistically significant relationship between monthly stock prices and number of shares traded?

1.6 Research Hypothesis

- H_{01} There is no significant variation in the central tendency of stock prices across the 10-year period.
- H_{02} There is no significant difference in stock price volatility between different years within the 10-year period.
- H_{03} There is no significant trend in monthly stock price movements over the 10-year period.

Ho₄ There is no directional difference between the monthly high prices and closing prices of the stock.

Ho₅ There is no linear correlation between stock price and number of shares traded.

1.7 Scope of the Study

This study focuses on analyzing the stock price behavior of ICICI Bank, a key constituent of the BSE Sensex, over a ten-year period from May 2015 to May 2025 using monthly data. The research is confined to examining the central tendency and dispersion of stock prices, identifying price movement patterns, testing for directional differences between high and closing prices, and exploring long-term trends in stock performance. The study also investigates the relationship between stock prices and trading turnover. All analyses are conducted using Gretl software, applying statistical tools such as descriptive statistics, time series plots, Sign Test, and correlation analysis. The findings are expected to provide insights into the market behavior of

ICICI Bank's stock and aid investors, analysts, and policymakers in decision-making.

1.8 Research Methodology

1.8.1 Research Design

The study adopts a quantitative research design based on secondary data analysis. It focuses on understanding the behavior of ICICI Bank's stock prices using statistical and econometric techniques to derive patterns, relationships, and trends over time.

1.8.2 Sources of Data

The study relies entirely on secondary data obtained from the official website of the Bombay Stock Exchange (BSE). Monthly stock price data and trading turnover for ICICI Bank were collected for the analysis.

1.8.3 Period of the Study

The study covers a ten-year period from May 2015 to May 2025, providing a comprehensive view of the stock price movements and trading behavior over time.

1.8.4 Variables Considered

The key variables considered in the study include:

Opening Price, High Price, Low Price, Closing Price and number of Shares traded.

1.8.5 Software Used

All statistical and econometric analyses were conducted using Gretl, an open-source software package specifically designed for time series and econometric modelling.

1.8.6 Tools of Analysis

The tools employed for the analysis include:

Descriptive Statistics (Mean, Median, Standard Deviation, etc.) Time Series Plots
Sign Test (for directional difference)
Correlation Analysis and Correlation Tests.

These tools were used to meet the objectives of the study and test the stated hypotheses effectively.

1.9 Limitations of the Study

The study is subject to certain limitations. It is confined to a ten-year period (May 2015 to May 2025), which may not capture long-term structural changes in the market. The focus on a single company, ICICI Bank, limits the generalizability of the findings to other firms or sectors. As the study relies on secondary data from the BSE, any inaccuracies in the source may affect the reliability of the analysis. Additionally, only selected variables such as stock prices and trading turnover are considered, excluding broader economic or firm-specific factors. The use of Gretl software also imposes certain analytical constraints compared to more advanced financial modelling tools.

1.10 Chapter Scheme

Chapter 1: Introduction and Framework

This chapter outlines the background of the study, research problem, objectives, research questions, hypotheses, scope, limitations, and methodology adopted for the analysis.

Chapter 2: Review of Literature

This chapter presents a review of past studies related to stock price behavior, turnover analysis, trend analysis, and statistical techniques used in stock market research. It also identifies research gaps and establishes the theoretical foundation for the study.

Chapter 3: Data Analysis

This chapter includes descriptive statistics, time series plots, Sign Test results, and correlation analysis to answer the research questions.

Chapter 4: Findings and Suggestions

This chapter discusses the major findings derived from the analysis, interprets the results in light of the research objectives, and provides suggestions for investors, researchers, and policy-makers.

Chapter II

LITERATURE REVIEW

2.1 Introduction

Understanding stock price behavior is essential for evaluating the financial performance and market perception of firms, especially in the banking sector. ICICI Bank, as a major constituent of the BSE Sensex and a leading private sector bank in India, holds significant sway in the Indian capital market. Its stock price movements not only reflect the bank's internal financial stability but also respond to broader economic trends and investor sentiment. In this context, analyzing the historical behavior of ICICI Bank's stock over an extended period provides meaningful insights into market dynamics, risk-return profiles, and investment potential.

A substantial body of literature has examined stock market volatility, macroeconomic linkages, and forecasting techniques using traditional statistical models such as GARCH, ARIMA, and regression-

based approaches. While these models offer valuable perspectives, they often fail to capture the complex, nonlinear, and dynamic behavior of stock prices, especially in sectors like banking where market sensitivity is high. Moreover, only a limited number of studies have focused on bank-specific stock behavior using micro-level monthly data and statistical tools that examine not just volatility but also price patterns and investor-driven metrics such as trading turnover.

This chapter presents a comprehensive review of existing studies related to stock market behavior, price volatility, comparative bank performance, and forecasting methods. It sets the foundation for the current study, which is distinct in its focused exploration of the stock price behavior of ICICI Bank over a ten-year period (2015–2025), using monthly data and applying tools such as descriptive statistics, Sign Test, correlation analysis, and time series visualization in Gretl. The chapter highlights the need to examine trends in central tendency, dispersion, directional price differences, and the relationship between stock

prices and turnover, thereby offering insights valuable to investors, analysts, and policymakers.

2.2 Stock Price Volatility and Market Behavior

An The study examined the relationship between stock returns and volatility in the Indian stock markets, specifically the NSE and BSE, during the financial years 2005–06 to 2013–14. The study aimed to analyze volatility clustering, persistence, asymmetry (leverage effect), and the return-volatility relationship using the GARCH-M model and EGARCH model. The results indicated that both markets exhibit significant volatility clustering and persistence, with recent and past news impacting volatility. The EGARCH model confirmed the presence of leverage effects, where negative news had a stronger impact on volatility than positive news. However, the study found no significant relationship between returns and volatility in either market (Ali, 2016).

The study examine the volatility behaviour of Indian sectoral indices, with a focus on identifying risk and return characteristics across sectors. The

study used data from twelve sectoral indices of the BSE, selected based on turnover, covering the period from January 2012 to December 2016. The objective was to analyze sector-wise volatility using daily index prices. The study employed descriptive statistics, the Augmented Dickey-Fuller (ADF) test to check stationarity, and the GARCH (1,1) model to assess volatility patterns. The findings revealed that the S&P BSE Bankex and S&P BSE Healthcare indices exhibited high and moderate levels of risk, respectively, along with high returns. The study suggests that investors may consider focusing on these indices for potential future gains, while also emphasizing the importance of monitoring market movements before making investment decisions. (Babu and Hariharan ,2018)

The study empirically investigated the relationship between stock returns and trading volume for the BSE Sensex over a five-year period, using daily data. The study aimed to explore whether volume measures—namely the number of shares traded, total turnover, and number of transactions—could

serve as proxies for information flow in the market. After confirming stationarity through unit root tests, the study examined contemporaneous correlations and applied the Granger causality and VAR models. The results revealed a positive contemporaneous relationship between trading volume and returns, with stock returns Granger-causing volume. Additionally, the VAR analysis indicated that returns depend on past return values, supporting the notion of sequential information dissemination in emerging markets like India. Among the volume measures, the number of transactions was found to be the most effective proxy for information in the Sensex.(Bhattacharya and Zavar ,2016)

The study analyzed short-term stock market volatility on the BSE over a six-month period (Sep 2020–Feb 2021). Using the Unit Root Test (ADF) and ARCH-M model, the study aimed to understand daily volatility and guide investment decisions. Results showed that the ARCH(1) model provided satisfactory insights into volatility, revealing that the market was inefficient and stock

prices behaved randomly during the period. (Mangukiya and Gondaliya ,2021)

The study investigated volatility asymmetry and the role of trading volume in the Indian stock market using data from 1997 to 2013. Employing GARCH, EGARCH, GJR-GARCH, and asymmetric CGARCH models, the study aimed to test the Mixture of Distribution Hypothesis (MDH). Results showed significant leverage effects and a positive relationship between volatility and trading volume. Volatility shocks were found to be highly persistent, even with volume adjustments, challenging earlier studies. (Naik and Padhi ,2013)

The study analyzed the volatility patterns of BSE 30 companies using daily closing prices from 2000 to 2015. The objective was to study stock-specific and index-wide volatility using descriptive statistics, correlation, regression, and GARCH models. Findings revealed significant levels of volatility among selected companies and confirmed the usefulness of the GARCH model in

capturing return behavior for investment strategy formulation. (Patjoshi and Tanty ,2017)

This study examined stock price return distributions of Indian banking companies to determine which statistical distributions best represent price behavior. Using distribution fitting tests, the authors identified Burr, Dagum, Log-Logistic, and Cauchy distributions as most suitable for capturing the heavy-tailed and skewed nature of banking stock returns. These findings assist fund managers in improving predictive accuracy for portfolio decisions. (Praloy, Sooraj, Archana, Rinu, Charul, & Parashar, N. ,2010)

The study aimed to identify the best-fit model for predicting stock prices using 10 years of historical data from the Bombay Stock Exchange (BSE). The study focused on helping investors make better-timed decisions to maximize gains and avoid common investment mistakes, such as poor entry or exit timing. Various time series forecasting techniques—such as Moving Average, ARIMA, and Holt-Winters models—were applied to

evaluate their effectiveness in short-term prediction. The findings suggest that time series models can provide reasonably accurate short-term forecasts, although predicting long-term trends remains challenging due to the stock market's non-seasonal and volatile nature. The study holds significance for investors, analysts, and policymakers, as it provides insights into forecasting methods that can improve decision-making in dynamic market environments. (Kulkarni, Jadha, and Dhingra ,2020)

The study examined the impact of temperature on returns and volatility of BSE Sensex and Nifty using monthly weather data from five Indian cities. Applying descriptive statistics, ADF tests, and the GARCH (1,1) model, the study found significant weather influence on stock returns in cities like Chennai, Mumbai, and Kolkata, while no such effect was found for Delhi. The study highlights the potential of behavioral and environmental factors in influencing market dynamics. (Sigo, M. O. ,2017)

The study examined return-volatility relationships in NSE and BSE from 1990 to 2016, focusing on volatility clustering, persistence, and leverage effects. Using ARCH and GARCH models, particularly GARCH (1,1), the study found strong evidence of persistent and clustered volatility in Indian stock returns. The findings confirmed the relevance of advanced econometric models in measuring market risk and guiding informed investment decisions. (Tanty and Patjoshi ,2016).

2.3 Capital Market Analysis

Researchers The study aimed to assess the stationarity of stock market time series data and predict the direction of change in stock indices using stochastic time series ARIMA modelling. The study focused on forecasting the BSE_CLOSE and NSE_CLOSE indices by selecting the best-fit ARIMA (0,1,0) model based on statistical criteria such as AIC, BIC, RMSE, MAE, MAPE, standard error of regression, and adjusted R^2 values. Using weekly data from January 6, 2014, to December 31, 2017 (187 observations), the model was

applied to forecast index values for the period January 7 to June 3, 2018 (22 values). The findings confirmed that the ARIMA model is effective for short-run forecasting and can serve as a valuable tool for investors in making informed and profitable decisions. (C. V. R. ,2019)

The study explored the limitations of traditional capital market models in accurately forecasting stock price movements, emphasizing the gap between theoretical assumptions and real market behavior. The study critically examined various established models such as the Markowitz Model, Sharpe Single Index Model, CAPM, technical and fundamental analysis, and the Efficient Market Hypothesis, highlighting that these often rest on the unrealistic assumption of rational investor behavior. In reality, markets are largely influenced by investor sentiment, emotions, greed, and fear. The paper argued that capital market performance should reflect investor perception rather than be viewed solely as a measure of a company's intrinsic strength. Focusing on the highly regulated banking sector in India, the study conducted a

comparative analysis of ICICI Bank and HDFC Bank chosen for their significant market capitalization to provide insights into market perception and performance dynamics. (Dhar ,2015)

The study focused on analyzing time series data of the Indian stock market to develop a statistical model capable of efficiently forecasting stock trends. Recognizing the complexity and volatility of stock prices, the study aimed to assist investors in maximizing returns and minimizing risks through accurate prediction models. The research employed time series analysis techniques to uncover market trends and proposed innovative forecasting approaches suited to the dynamic nature of the stock market. The study highlighted the significance of predictive modeling in identifying high-performing stocks and confirmed that statistical models, when properly applied to historical stock data, can serve as valuable tools for future investment decisions. (Idrees, Alam, and Agarwal , 2019)

The study aimed to improve forecasting accuracy in financial time series by integrating statistical models with Artificial Neural Networks (ANN) to create a hybrid model. The study explored time series forecasting for stock prices and indices, specifically focusing on the Bombay Stock Exchange (BSE) and NIFTY MIDCAP50. By combining the strengths of traditional statistical techniques and neural networks, the study sought to enhance prediction capabilities. After evaluating multiple models, the research identified optimal ANN parameters—2960 epochs, a learning rate of 0.28, and momentum of 0.5—through extensive experimentation. The findings demonstrated that hybrid models significantly outperform single-model approaches in forecasting accuracy, offering promising tools for investors and analysts in the Indian stock market. (Kumar and Yu ,2013)

The study investigated stock market volatility using a random matrix approach to analyze correlations between stocks listed on the BSE during 2000–2002. Using daily returns of 70 stocks and matrix analysis, the study found that the largest

eigenvalue of the correlation matrix is highly correlated with market volatility. The research introduced a Correlation Index (CI), derived from eigenvector analysis, as a tool to quantify and track market volatility over time. (Kulkarni and Deo , 2007)

The study examined the long-run and short-run relationships between BSE Sensex and macroeconomic variables including IIP, inflation, interest rates, exchange rates, FII, gold prices, and money supply for the period April 1999 to March 2017. Using Johansen Cointegration, Granger Causality, and VECM models, the study found long-term causality with most variables and short-run causality between Sensex and both inflation and money supply, indicating the significant macroeconomic sensitivity of the Indian stock market. (Misra, P. ,2018)

The study investigated the causal relationship between BSE Sensex and macroeconomic indicators using annual data from 1981 to 2006. Employing ADF Unit Root Tests and Granger

Causality, the study revealed that while stock market indicators and GDP are highly correlated, there is no causal relationship. This suggests that the BSE Sensex may not serve as a reliable indicator of India's overall economic growth. (Sahu, N. C. & Dhiman, D. H. ,2011)

The study investigated the relationship between the BSE Sensex and five macroeconomic variables—index of industrial production, wholesale price index, gold price, foreign institutional investment, and real effective exchange rate—using monthly data. The objective was to examine both short-run and long-run linkages between stock prices and these macroeconomic indicators. Employing Johansen's co-integration and Vector Error Correction Model (VECM), the study found a long-run equilibrium relationship between the stock market index and all the selected variables. Stock prices were found to be positively associated with industrial production, foreign institutional investment, inflation, and exchange rate, while negatively related to gold prices, highlighting the

significant role of macroeconomic factors in stock price determination (Venkatraja, 2016).

A study conducted by Thomas.B on daily stock price dynamics of IRCTC and RVNL show contrasting behaviours, with IRCTC trading at higher and more stable prices, while RVNL remains lower-priced and more volatile. Unit root tests confirm both stocks are $I(1)$, supporting further long-run linkage analysis. However, Engle–Granger results indicate no cointegration, suggesting an absence of long-term equilibrium between the firms despite their sectoral connection. VAR findings reveal significant short-run influence of IRCTC on RVNL, indicating short-term shock transmission. Overall, IRCTC emerges as a leading indicator in India’s railway-linked stock movements (Thomas, 2025).

2.4 Stock Market Performance and Predictive Analysis in the Banking Sector

The This study presents a survey on the application of neural networks in forecasting stock market performance within the banking sector. It explores

various domains and predictive applications of neural networks, highlighting their capability to address the stock market's complex, non-linear, and chaotic behavior. The primary objective is to enhance return prediction accuracy while minimizing investment risk. The study emphasizes the significance of neural network models in capturing market trends and improving financial decision-making. The analysis is supported by relevant empirical results, demonstrating the potential of AI-based tools in financial forecasting. (Narayan, T. A. ,2022).

This study explored the correlation between financial and stock market performance of Indian banks using indicators such as PAT, RoNW, and NPAs. Using correlation analysis, the study found a strong positive relationship between financial metrics and stock prices, confirming that robust banking performance is reflected in capital market behavior. Notably, most indicators aligned with expected outcomes, except for a deviation in the NII/Total Funds ratio. (Singh ,2006)

This study evaluated banking stock performance during the COVID-19 crisis by analyzing risk, returns, and the influence of economic variables like BSE Sensex, exchange rate, FII, and G-Sec coupon rate. Using regression and correlation analysis in SPSS, the study revealed varied relationships across banks, with private bank prices adjusting more quickly post-market crashes. The findings underscore the differential impact of macroeconomic factors on public vs. private banking stocks. (Sadanand, V. K. & Fathima, A., 2024)

The study aims to analyze and compare the financial performance of HDFC and ICICI Bank using the CAMELS model (Capital Adequacy, Asset Quality, Management, Earnings Quality, Liquidity, and Sensitivity) and t-test for the period 2003 to 2012. The findings indicate that both banks exceed Basel norms in capital adequacy, with HDFC Bank demonstrating stronger management efficiency through lower NPAs (<0.5). HDFC also reported higher net profit, operating profit, return on net worth, and liquidity, while ICICI showed

better long-term solvency due to lower debt-equity and burden ratios. Though no significant difference was found statistically, HDFC Bank marginally outperformed ICICI Bank. The study suggests improving operational efficiency and capital management to enhance overall bank performance. (Srinivas, K. and Saroja, L., 2013). Rai and Sharma analyzed the effect of Mergers and Acquisitions (M&A) announcements on ICICI Bank's stock prices using the event study methodology. Focusing on four M&A cases since 2000, the study found that such announcements had significant short-term impacts on stock prices, indicating that investors respond quickly to corporate consolidation news, which can be leveraged for investment timing. (Rai & Sharma, 2014)

2.5 Research Gap

While numerous studies have explored the volatility of Indian stock markets and the performance of sectoral indices using conventional econometric and statistical models, there is a

noticeable lack of focused research analyzing the detailed price behavior of individual banking stocks over an extended time frame. Specifically, studies concentrating on ICICI Bank—a key private sector bank influencing the BSE Sensex—have often been limited to event-based performance or short-term volatility analysis.

Existing literature seldom combines the study of monthly high and closing prices, central tendency and dispersion, and the association between stock prices and trading turnover using basic but robust statistical methods like the Sign Test and correlation analysis. Additionally, most studies overlook the practical application of open-source statistical tools like Gretl, which are accessible and useful for replicable financial research.

This study aims to fill this gap by offering a holistic and data-driven examination of ICICI Bank's stock price behavior from June 2015 to May 2025. By integrating classical statistical techniques and focusing on long-term monthly data trends, it provides fresh insights into investor behavior and

stock performance. The research not only addresses theoretical gaps but also offers practical relevance for stakeholders looking to understand market stability and formulate informed investment strategies.

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Chapter III

Data Analysis and Interpretation

3.1 Introduction

This chapter outlines the methodological framework adopted for analyzing the stock price behavior of ICICI Bank over the period from May 2015 to May 2025. It explains the research design, data sources, variables considered, software used, and the analytical tools employed in the study. The methodology is structured to provide a systematic approach for meeting the research objectives and testing the proposed hypotheses. To achieve the objectives of the study, various tools and techniques were employed. Microsoft Excel was used for initial data organization and graphical representation, while Gretl software was utilized for statistical and time series analysis. Analytical tools such as descriptive statistics, time series plots, Sign Test, and correlation analysis were applied to examine stock price behavior. The specific objectives guiding this study are:

1. To describe the central tendency and dispersion characteristics of ICICI Bank's stock prices over the study period.
2. To analyze the monthly price movements of the stock from May 2015 to May 2025.
3. To test whether the monthly high prices are consistently greater than the closing prices.
4. To identify any long-term trends in the performance of the stock during the period under study.

The results from the analysis are presented in the following sections, with detailed interpretation based on statistical output.

3.2 Data Description

The present study is based on secondary data consisting of monthly stock price information of ICICI Bank collected from the official website of the Bombay Stock Exchange (BSE). The data includes key stock market indicators such as the monthly high price monthly, monthly low price and closing price. These variables are crucial for

analyzing price behavior, volatility, and market activity over time.

The period of study spans ten years, from May 2015 to May 2025, providing a detailed view of stock performance under varying market conditions. Given the monthly frequency of observation, the dataset comprises a total of 120 data points ($12 \text{ months} \times 10 \text{ years}$) for each variable. The data has been compiled from credible financial sources and includes the following variables for each month:

- Month – Time index from May 2015 to May 2025
- Open Price – The stock price at the beginning of the month
- High Price – The highest traded price during the month
- Low Price – The lowest traded price during the month
- Close Price – The last traded price at the end of the month

- No. of Shares – The number of shares traded in the month
- No. of Trades – The number of separate transactions conducted

For the purposes of this study, particular focus has been placed on High Price, low price and Close Price as the key variables to analyze price behavior and trading activity. The dataset is time-series in nature, allowing for a longitudinal assessment of stock price dynamics. The data was cleaned and validated before analysis to ensure consistency and accuracy across the study period.

Table 3.1 Descriptive Statistics

This section presents the measures of central tendency and range for the monthly stock prices of ICICI Bank, providing a foundational understanding of the stock's price behaviour over the 10-year study period. The variables analysed include Open, High, Low, and Close prices. Table 3.1 show the measures of central tendency and range of the data.

Table 3.1
Descriptive Statistics: Measures of Central
Tendency and Range

Variable	Mean	Median	Minimum	Maximum
Open Price	590.27	436.90	195.10	1426.4
High Price	625.78	481.95	229.00	1471.1
Low Price	560.02	407.20	180.80	1386.8
Close Price	598.52	437.25	190.00	1446.0
No. of Shares Traded	21078952	19769454	3734903	74079245

Source: Secondary Data Gretl Output

Interpretation:

The table 3.1 provide a clear overview of ICICI Bank's stock performance and trading activity over the 10-year period from May 2015 to May 2025. Among the price variables, the High Price recorded the highest mean value of ₹625.78, while the Low

Price had the lowest mean at ₹560.02, reflecting the typical trading range of the stock. The Close Price (₹598.52) and Open Price (₹590.27) lie between these values, showing consistent alignment throughout the period. Median values are generally lower than the means across all price categories, indicating a right-skewed distribution. The stock reached a maximum high of ₹1471.10 and dropped to a minimum low of ₹180.80, signifying notable price volatility. The Number of Shares Traded had a mean of 21,078,952, with a minimum of 3,734,903 and a maximum of 74,079,245, suggesting substantial fluctuations in trading volume over time. This variable provides important context to the price movements, reflecting periods of heightened investor interest or market activity.

Table 3.2 show the measures of dispersion and shape of the data.

Table 3.2
Descriptive Statistics: Measures of Dispersion
and Shape

Variable	SD	CV	Skewness	Ex. kurtosis
OpenPrice	337.72	0.57214	0.76215	- 0.69024
High Price	351.45	0.56161	0.74610	-0.69261
Low Price	329.88	0.58905	0.76149	-0.70820
Close Price	345.41	0.57711	0.76297	-0.66486
Shares Traded	12506236	1	1	2

Source: Secondary Data Gretl Output

The table shows that the standard deviation (SD) values for the price variables indicate substantial variability, with the High Price showing the greatest dispersion (₹351.45), followed by the Close Price (₹345.41) and Open Price (₹337.72). The Coefficient of Variation (CV) values range

narrowly between 0.56161 and 0.58905, suggesting consistent relative volatility across the price variables. In contrast, the CV for the Number of Shares Traded is 1.00, indicating a much higher relative dispersion in trading activity compared to stock prices. All four price variables exhibit positive skewness (approximately 0.75), indicating right-skewed distributions where higher-than-average price values occurred more frequently than extreme low prices. The Number of Shares Traded shows a skewness of 1, further emphasizing the asymmetry toward higher trading volumes.

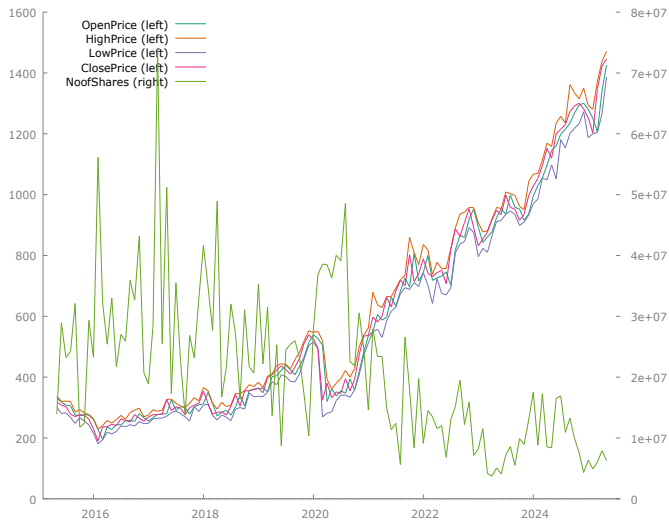
The excess kurtosis for all price variables is negative, ranging from -0.66486 to -0.70820 , suggesting platykurtic distributions—flatter than the normal distribution with fewer extreme price movements. However, the excess kurtosis of 2 for the Number of Shares Traded indicates a leptokurtic distribution, meaning trading volumes exhibited more extreme deviations from the mean than a normal distribution would predict.

These observations point to moderate volatility in stock prices and high variability and extremity in

trading volumes, offering deeper insights into the stock's market behavior during the study period.

3.4 Price Movement Analysis

This section analyses the monthly price movement of ICICI Bank. Using a time series plot of Open, High, Low, and Close prices from 2015 to 2025, to identify long-term trends and short-term fluctuations in stock performance. Figure 3.1 shows the trend.



Source: Secondary Data Gretl Output

Interpretation:

The time series graph provides a visual representation of ICICI Bank's stock performance over a ten-year period from May 2015 to May 2025. It illustrates the monthly trends in the Open, High, Low, and Close prices, along with the number of shares traded. The stock prices show a consistent upward trajectory, indicating strong long-term performance. A notable dip is observed around early 2020, which aligns with the onset of the COVID-19 pandemic. However, the prices quickly recovered and have continued to rise steadily, reaching new peaks by 2025. The close alignment of the four price lines suggests stability and minimal intraday price fluctuations, reflecting a mature and well-regulated stock.

The trading volume, represented by the green line on the secondary Y-axis, shows high volatility throughout the period. Particularly between 2016 and 2020, there are multiple spikes in the number of shares traded, indicating heightened investor activity during periods of market movement or

significant financial news. A sharp surge in trading volume is visible during the early 2020 market downturn, suggesting reactive behavior from investors in response to global uncertainties. In contrast, trading activity appears to stabilize post-2021, even as prices continue to rise. This inverse relationship between rising prices and declining volume may imply a shift in investor strategy toward long-term holding and reduced speculative trading.

Overall, the graph reflects a strong and resilient growth trend in ICICI Bank's stock price, supported by active investor participation during volatile periods and steady confidence in the company's performance in recent years. The reduced volatility in volume in the later years may be a sign of market maturity and sustained investor trust, making ICICI Bank a potentially attractive stock for long-term investment.

Testing of Normality

Doornik-Hansen test for normality was applied to determine whether the data follows a normal

distribution. The following hypothesis is formulated.

H_0 : The data for stock prices follows a normal distribution.

Table 3.3
Testing Normality

Particulars	Test Statistic Value	p-Value
Open Price	49.4622	1.81729e-011
High Price	46.5539	7.77942e-011
Low Price	50.5274	1.0669e-011
Close Price	50.5274	1.0669e-011
No. of Shares Traded	20.9186	2.868e-005

Source: Secondary Data, Gretl Output

Since the p-values for all variables are significantly less than 0.05, the null hypothesis of normality is

rejected, indicating that the data do not follow a normal distribution. Hence, we move forward to non-parametric test in testing of all hypotheses.

3.6 Directional Analysis of High and Close Prices

This section evaluates whether the monthly High Prices of the stock are consistently greater than the Close Prices over the study period. The analysis applies the Sign Test, a non-parametric statistical method used to determine the direction of differences in paired data. By examining the frequency of months in which the High Price exceeds the Close Price, this test helps identify any consistent directional pattern in price behaviour, which may reflect market dynamics, investor sentiment, or trading strategies. The following null hypothesis is formulated:

H_{01} There is no directional difference between the monthly high prices and closing prices of the stock.

The Sign Test assesses whether the number of positive and negative differences between paired

observations is significantly different from what would be expected by chance.

Sign Test

Test for difference between High Price and Close Price

Number of differences: $n = 121$

Number of cases with Month > Open Price: $w = 0$
(0.00%)

Under the null hypothesis of no difference, W follows $B(121, 0.5)$

$\text{Prob}(W \leq 0) = 3.76158\text{e-}037$

$\text{Prob}(W \geq 0) = 1$

Interpretation:

The Sign Test was conducted to examine whether there is a statistically significant difference between the High Price and Close Price of ICICI Bank stock over 121 months. The test revealed that in all 121 cases, the High Price was consistently greater than the Close Price ($w = 0$), indicating a unidirectional difference. Under the null

hypothesis that assumes no difference between the two prices (i.e., a 50% chance of either being higher), the probability of observing such an extreme result purely by chance is extremely low (p-value $\approx 3.76e-37$).

Given that the p-value is far below the conventional significance level of 0.05, we reject the null hypothesis. This provides strong statistical evidence that the High Price is significantly greater than the Close Price for ICICI Bank across the observed period. The result supports the logical market behavior where intraday price peaks are typically not sustained by market close, and reinforces the reliability of the dataset used in further analysis.

3.7 Pearson Correlation coefficient

To assess the relationship between stock price and number of shares traded. Correlation coefficients, using the observations 2015:05 - 2025:05 5% critical value (two-tailed) = p-value 0.0000 for $n = 121$.

Table 3.4
Correlation matrix

Open price	High price	Low price	Close price	No of shares Traded	
1.0000	0.9961	0.9961	0.9932	-0.6714	Open price
	1.0000	0.9958	0.9974	-0.6583	High price
		1.0000	0.9968	-0.6754	Low price
			1.0000	-0.6649	Close price
				1.0000	Shares Traded

Source: Secondary Data Gretl Output

Interpretation of Correlation Matrix:

The correlation matrix shows a very high positive correlation among the stock price variables—open, high, low, and close—indicating that they move closely together over time. This reflects a

consistent price trend in the stock's behavior. In contrast, the number of shares traded exhibits a moderate negative correlation with all the price variables, suggesting that trading volume tends to decrease when stock prices rise. This may imply reduced investor participation during price peaks or cautious trading behavior at higher valuation levels.

Table 3.5
Correlation with Open Price

Variables	Correlation	Interpretation
Open Price & High Price	0.9920	Very strong positive correlation — when Open Price increases, High Price tends to increase significantly.
Open Price & Low Price	0.9873	Very strong positive correlation — changes in Open Price are strongly

		associated with changes in Low Price.
Open Price & Close Price	0.9833	Very strong positive correlation — Open and Close prices move closely together.
Open Price & No of Shares traded	-0.7257	Strong negative relationship— as the Open Price increases, the number of shares traded tends to decrease noticeably, Conversely, when the Open Price is lower, trading activity tends to rise, reflecting a clear inverse association between

		price levels and trading volume.
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Table 3.6
Correlation with High Price

Variables	Correlation	Interpretation
High Price & Low Price	0.9897	Very strong positive correlation.
High Price & Close Price	0.9939	Very strong positive correlation.
High Price & No of Shares traded	-0.7023	Strong negative correlation.

Variables	Correlation	Interpretation
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Table 3.7
Correlation with Low Price

Variables	Correlation	Interpretation
Low Price & Close Price	0.9912	Very strong positive correlation.
Low Price & No of Shares traded	-0.7307	Strong negative correlation.
Variables	Correlation	Interpretation
Low Price & Close Price	0.9912	Very strong positive correlation.

Table 3.8
**Correlation with Close price and Number of
shares traded**

Variables	Correlation	Interpretation
Close Price & No of shares traded	-0.7037	Strong negative correlation.
Variables	Correlation	Interpretation
Close Price & No of shares traded	-0.7037	Strong negative correlation.
Variables	Correlation	Interpretation

All price variables (Open, High, Low, Close) are very strongly correlated with each other (above 0.98). This is expected in stock/commodity price data where prices throughout the day move closely together. The strong negative correlations (−0.70

to -0.73) between the number of shares traded and all price variables indicate that trading activity increases when stock prices are lower and declines when prices rise, suggesting greater investor participation at lower price levels.

The following null hypothesis is tested

H_{03} There is no linear correlation between stock price and no of shares traded

Spearman's rank correlation coefficient is used for testing the linearity between low price and no of shares traded.

Spearman's rank correlation

Spearman's rank correlation coefficient (ρ) = -0.73074787 . $t(119) = -11.6774$, with two-tailed p-value 0.0000

Interpretation:

The result shows a Spearman's ρ of -0.7307 , with a test statistic value of $t(119) = -11.6774$ and a p-value < 0.001 . Since the p-value is far below the 0.05 significance level, the null hypothesis is rejected. This indicates a strong and statistically

significant negative correlation between the two variables, meaning that as the Low Price decreases, trading activity tends to increase, and vice versa.

3.8 Conclusion

Based on the comprehensive analysis of ICICI Bank's monthly stock data from May 2015 to May 2025, this chapter reveals critical insights into the stock's behavior over the ten-year period. The descriptive statistics highlighted significant variability in stock prices, with noticeable skewness and deviation from normal distribution, thereby justifying the use of non-parametric methods. Time series plots indicated considerable fluctuations, while the Sign Test confirmed that high prices were consistently greater than close prices, pointing to intra-month volatility. The correlation analysis revealed strong positive relationships among price variables and a moderate negative relationship with trading volume, indicating inverse movement between price levels and market participation. These findings together provide a solid empirical foundation to understand

the performance trends, volatility patterns, and investor behavior associated with ICICI Bank's stock, aligning with the objectives of this study.

Chapter IV

FINDINGS AND SUGGESTIONS

4.1 Introduction

This chapter presents the major findings derived from the analysis of ICICI Bank's stock price movements and trading patterns over the ten-year period from May 2015 to May 2025. The results are based on the application of descriptive statistics, time series visualization, correlation analysis, and non-parametric tests, which together provide a comprehensive understanding of the stock's behavior. The analysis highlights important aspects such as central tendency, variability, long-term trends, and the relationship between price levels and trading turnover. These findings not only reflect the internal dynamics of the stock but also capture the broader volatility and complexities of the market environment.

The findings have been systematically discussed in alignment with the research objectives outlined in

Chapter I, ensuring clarity and relevance to the study's aims. Based on these empirical insights, a set of practical suggestions is also presented for investors, market participants, and future researchers. These recommendations are intended to improve investment decisions, enhance market understanding, and provide directions for further academic inquiry.

4.2 Research Objectives

1. To describe the central tendency and dispersion characteristics of stock prices.
2. To analyse the monthly price movements of over a 10 year period.
3. To test whether the monthly high prices of the stock are consistently greater than the closing prices.
4. To examine the relationship between monthly stock prices and trading turnover.

4.3 Summary of Findings

The analysis of ICICI Bank's stock price behavior from May 2015 to May 2025 revealed several key

insights. Descriptive statistics showed considerable variability in stock prices, with right-skewed and platykurtic distributions, while trading volume displayed high dispersion and leptokurtic characteristics. Time series analysis indicated a strong long-term upward trend, with a temporary dip during the COVID-19 period, followed by steady recovery and growth. The Sign Test established that monthly High Prices were consistently greater than Close Prices, confirming intra-month volatility. Correlation analysis demonstrated very strong positive relationships among price variables (Open, High, Low, Close) and strong negative correlations (-0.70 to -0.73) between prices and trading volume, suggesting higher investor activity at lower price levels. Overall, the findings highlight the stock's resilience, long-term growth potential, and the inverse association between price levels and market participation.

4.3.1 Summary of Data

The study employed monthly time-series data of ICICI Bank Ltd. covering the period from May 2015 to May 2025, consisting of 119 observations. The key variables considered include Open Price, High Price, Low Price, Close Price, and Number of Shares Traded. This dataset provides a comprehensive view of stock price movements and trading activity over a 10-year horizon, facilitating an in-depth analysis of market behavior, volatility, and the relationship between price levels and trading volume. The data was carefully compiled, cleaned, and analyzed using Gretl and Excel to ensure reliability, accuracy, and validity for statistical interpretation.

4.3.2 Central tendency and dispersion

1. The High Price recorded the highest mean (₹625.78), while the Low Price had the lowest mean (₹560.02), reflecting the typical trading range of ICICI Bank's stock.

2. Median values were lower than the means for all variables, indicating right-skewed price distributions.
3. Standard deviation values were substantial across all prices, with the High Price showing the greatest variability (₹351.45).
4. Coefficient of Variation (CV) values for prices were stable (0.56–0.59), showing consistent relative volatility, whereas trading volume had a CV of 1.00, reflecting much higher relative dispersion.
5. Excess kurtosis was negative for all price variables, indicating platykurtic distributions, while turnover displayed leptokurtic behavior, reflecting more extreme fluctuations in trading activity.

The analysis of central tendency and dispersion of ICICI Bank's stock prices shows that the High Price had the highest mean while the Low Price recorded the lowest, reflecting the stock's typical trading range. Median values were below the means, indicating right-skewed distributions. Price

variables exhibited considerable variability, with the High Price showing the greatest standard deviation, while CV values remained stable, suggesting consistent relative volatility. Negative excess kurtosis confirmed flatter-than-normal distributions for prices, whereas trading volume displayed high dispersion and leptokurtic behavior, highlighting more extreme fluctuations in market activity.

Theoretical Linkage - Modern Portfolio Theory

The findings on central tendency and dispersion of ICICI Bank's stock prices align with Modern Portfolio Theory, which emphasizes the trade-off between return (mean values) and risk (variability). The high standard deviation and CV confirm equity market volatility, consistent with the Efficient Market Hypothesis, where prices reflect information and fluctuate randomly. The right-skewed and platykurtic distributions of prices mirror common deviations from normality in financial data, while the leptokurtic behavior of

turnover supports the Mixture of Distributions Hypothesis, linking trading volume with volatility.

4.3.3 Monthly price movements

1. The time series graph showed a consistent upward trend in ICICI Bank's stock prices across the decade.
2. A sharp dip occurred in early 2020, coinciding with the COVID-19 pandemic, followed by a strong recovery.
3. Post-2021, prices rose steeply, reaching record highs by 2025, reflecting investor confidence.
4. The Open, High, Low, and Close prices moved in close alignment, showing stability and minimal intraday divergence.
5. Trading volume was volatile, with multiple spikes between 2016 and 2020, particularly during periods of uncertainty or significant market events.

The analysis of monthly price movements over the ten-year period reveals a steady long-term upward trend in ICICI Bank's stock, interrupted by a sharp decline during the COVID-19 pandemic in early

2020, followed by a strong recovery. From 2021 onwards, prices rose steeply, reaching record highs by 2025, reflecting growing investor confidence. The close alignment of Open, High, Low, and Close prices indicates stability with minimal intraday divergence, while trading volume showed volatility with notable spikes during periods of market uncertainty and major events.

Theoretical Linkage - Random Walk Theory:

The observed price movements of ICICI Bank align with the Random Walk Theory and the Efficient Market Hypothesis (EMH), which suggest that stock prices adjust rapidly to new information, as seen in the sharp 2020 dip and subsequent recovery. The long-term upward trend supports the idea of market efficiency reflecting fundamentals and investor confidence. The close alignment of Open, High, Low, and Close prices indicates reduced intraday volatility, consistent with a mature and liquid stock. Meanwhile, the spikes in trading volume during uncertain periods

validate the Mixture of Distributions Hypothesis (MDH), which links volatility and trading activity.

4.3.4 Monthly High vs. Closing Price

1. The Sign Test confirmed that in all 121 months, High Prices were consistently greater than Close Prices.
2. The probability of such a result occurring by chance was extremely low ($p \approx 3.76e-37$).
3. The null hypothesis was rejected, establishing a significant and consistent directional difference between the two prices.
4. This pattern aligns with expected market behavior, where intraday peaks are not typically sustained by market close.
5. The findings validate the dataset and reinforce the appropriateness of non-parametric testing.

The results of the Sign Test confirmed that in all 121 months, the High Prices were consistently greater than the Close Prices, with an extremely low probability of chance occurrence ($p \approx 3.76e-37$). This led to the rejection of the null hypothesis

and established a significant directional difference between the two prices. The outcome aligns with normal market behavior, where intraday peaks are seldom sustained until market close, and further validates the dataset while justifying the use of non-parametric testing methods.

Theoretical Linkage - Market Microstructure Theory:

The consistent difference between High and Close prices supports the principles of market microstructure theory, which explains intraday price formation and the tendency for prices to peak during trading but adjust downward by market close. The rejection of the null hypothesis reinforces the idea that stock prices follow predictable intraday patterns, consistent with empirical evidence that closing prices are less volatile than highs due to settlement and investor behavior. The use of the Sign Test reflects the relevance of non-parametric approaches in financial studies, particularly when price data deviate from normality.

4.3.5 Stock prices and number of shares traded

1. Price variables (Open, High, Low, Close) were all highly correlated with each other, with coefficients above 0.98.
2. The number of shares traded showed strong negative correlations with all price variables (–0.70 to –0.73).
3. This inverse relationship indicates that trading activity increases when stock prices fall and decreases when prices rise.
4. Spearman's rank correlation between Low Price and number of shares traded ($\rho = -0.7307$, $p < 0.001$) confirmed a statistically significant negative association.
5. The findings suggest investors were more active at lower price levels, reflecting affordability or speculative trading behavior.

The analysis of the relationship between monthly stock prices and number of shares traded shows that all price variables were highly correlated with

each other, while the number of shares traded exhibited strong negative correlations with prices (-0.70 to -0.73). This inverse association indicates that trading activity tends to rise when stock prices are lower and declines as prices increase. Spearman's rank correlation further confirmed this negative relationship as statistically significant, suggesting that investors are more active at lower price levels, reflecting affordability and speculative trading tendencies.

Theoretical Linkage – Mixture of Distributions Hypothesis (MDH):

The inverse relationship between stock prices and number of shares traded is consistent with the Mixture of Distributions Hypothesis (MDH), which links volatility with trading volume. The negative correlation suggests that investor activity intensifies at lower price levels, reflecting affordability and speculative opportunities, aligning with behavioral finance theories that highlight investor sensitivity to price changes. The strong inter-correlation among price variables

supports the principles of market efficiency, where stock prices move together in response to information and broader market forces.

4.4 Suggestions

For Investors

- Investors should closely monitor periods of price dips, as trading activity tends to rise at lower price levels, offering opportunities for entry.
- Given the consistent upward trend post-2021, long-term investors may benefit from a buy-and-hold strategy in ICICI Bank's stock.
- Since High Prices consistently exceed Close Prices, intraday traders can take advantage of price volatility during the day.

For Market Analysts

- The strong correlations among price variables suggest that price movement patterns can be predicted with greater reliability, aiding in technical analysis.

- Negative correlations between number of shares traded and price levels highlight the need to integrate volume indicators with price trends for better market predictions.

For Policy Makers and Regulators

- The volatility observed during external shocks like COVID-19 highlights the importance of timely regulatory interventions to stabilize markets.
- Awareness campaigns could be designed to help small investors understand the risks of trading in highly volatile periods.

For Future Researchers

- Further studies can focus on sectoral comparisons to see if the inverse relationship between prices and turnover holds across different industries.
- Advanced econometric models like ARIMA or GARCH could be applied to capture volatility clustering and improve forecasting accuracy.

4.4.1 Scope for Further Studies

The present study on ICICI Bank's stock price behavior provides useful insights, but it also opens avenues for further research. Future studies could extend the analysis by including other banking and non-banking companies to enable sectoral or cross-industry comparisons. Incorporating macroeconomic variables such as interest rates, inflation, or GDP growth may also help in understanding the external factors influencing stock price movements and trading activity. Moreover, the application of advanced econometric techniques like ARIMA, GARCH, or machine learning models could offer deeper insights into volatility forecasting and trend analysis. Expanding the time frame or using daily data instead of monthly observations would further enhance the precision of results, making future research more comprehensive and robust.

4.5 Conclusion

The study on ICICI Bank's stock price behavior over the ten-year period from May 2015 to May

2025 provides significant insights into its market performance, volatility patterns, and trading dynamics. The descriptive analysis revealed considerable variability in stock prices, with right-skewed and platykurtic distributions, while turnover displayed higher dispersion and leptokurtic characteristics. Time series analysis confirmed a strong long-term upward trend, with temporary disruptions during external shocks such as the COVID-19 pandemic, followed by a robust recovery. The Sign Test established that monthly High Prices consistently exceeded Close Prices, indicating persistent intraday volatility. Correlation results showed strong positive relationships among price variables and significant negative associations between stock prices and trading turnover, highlighting increased investor participation at lower price levels. Overall, the findings emphasize the resilience of ICICI Bank's stock, its long-term growth potential, and the interplay between price levels and trading activity. The study contributes to a better understanding of stock market behavior and provides useful

implications for investors, analysts, and future researchers.

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