Darshan - The International Journal of Commerce and Management ISSN: 2583-1682 (online) Volume – 5, Issue – I, June – 2025
Bi-Annual double-blind peer-reviewed International Journal
Paper Submission Date: 23rd April,2025 Paper sent back for Revision: N/A Paper Acceptance Date: 30th April,2025

Performance and Volatility Analysis of the Indian Capital Market Using Secondary Data for the Time Period 2018–2023

Dr. Gaurav N. Mehta, Dr. Chintan N. Vora.
Assistant Professor, Shri Gosar Hansraj Gosrani Commerce & Shri D.D.Nagda B.B.A. College, Jamnagar, India.
Associate Professor, Shri Gosar Hansraj Gosrani Commerce & Shri D.D.Nagda B.B.A. College, Jamnagar, India.
Email - mehtagaurav86@gmail.com, vorachintan13@gmail.com.

Abstract: This research paper analyzes the performance and volatility of the Indian capital market over a five-year period (2018–2023) using secondary data from the National Stock Exchange (NSE), Bombay Stock Exchange (BSE), and reports from SEBI and RBI. The study evaluates stock index trends, market capitalization changes, sector-wise growth, and the impact of macroeconomic indicators on capital market behavior. Special focus is given to the COVID-19 pandemic period and the subsequent market recovery. The findings suggest that although the Indian capital market experienced significant short-term shocks, long-term growth remained resilient. The paper concludes with implications for investors and policymakers.

Key Words: Indian Capital Market, Stock Market Volatility, NSE, BSE, SEBI, RBI, Stock Index Trends.

1. Introduction:

The capital market plays a pivotal role in mobilizing long-term funds and contributing to a country's economic development. In India, the BSE and NSE are the primary exchanges facilitating capital market transactions. This study uses secondary data to analyze how various events, particularly the pandemic, have affected market performance, sectoral behavior, and investor sentiment.

2. Objectives:

1. To analyze trends in major Indian stock indices (NIFTY 50 and BSE SENSEX) from 2018–2023
2. To assess sectoral performance and identify high-growth industries
3. To evaluate market volatility using VIX and other indicators
4. To examine the effect of macroeconomic events on market trends
5. To provide investment insights based on empirical findings

3. Literature Review:

3.1 Role of Capital Markets

Capital markets are critical for economic growth, offering platforms for equity and debt instruments and enabling resource allocation.

3.2 Previous Research

Singh (2021) studied post-COVID capital market behavior and observed rapid recovery in tech and pharma sectors. Sharma & Mehta (2019) analyzed BSE volatility and concluded that global cues had more impact than domestic policies. SEBI and RBI reports have highlighted the rise in retail participation during 2020–2022 due to digital investing platforms.

4. Research Methodology:

4.1 Type of Research

Quantitative, analytical study based on **secondary data**

4.2 Data Sources

- NSE and BSE official websites (Index performance, sector data)
- SEBI Annual Reports (2018–2023)
- RBI Bulletins (Inflation, Interest Rates)
- Yahoo Finance and TradingView (VIX, Daily Trends)

4.3 Tools Used

- Microsoft Excel
- Python for time-series plotting
- Basic statistical analysis: CAGR, standard deviation, beta, correlation

5. Data Analysis and Interpretation:

5.1 Index Performance: NIFTY 50 and SENSEX (2018–2023)

Year	NIFTY 50 Closing	% Change	SENSEX Closing	% Change
2018	10,862	-0.5%	36,068	-0.2%
2019	12,168	+12.0%	41,253	+14.3%
2020	13,981	+14.9%	47,751	+15.8%
2021	17,354	+24.2%	58,253	+22.0%
2022	18,105	+4.3%	60,840	+4.4%
2023	21,123	+16.7%	70,382	+15.7%

Interpretation:

Despite a pandemic-induced crash in early 2020, both indices rebounded strongly. The highest growth was seen in 2021, fueled by economic reopening and FII inflows.

5.2 Sectoral Performance (2018–2023)

Sector	CAGR (%)	Top Year	Notes
IT	18.2	2021	Digitization surge post-COVID
Pharma	16.5	2020	Defensive asset, vaccine boom
Banking	12.1	2023	Recovery after NPA stress
Auto	9.4	2023	Semiconductor supply stabilized
FMCG	10.6	2022	Consistent performance
Realty	7.8	2021	Interest rate-sensitive sector

5.3 Market Volatility: India VIX (Volatility Index)

Year	Average VIX	High VIX (Event)
2018	13.7	20.3 (Budget announcement)
2019	15.2	22.1 (General elections)
2020	32.1	61.0 (COVID-19 lockdown)
2021	19.4	27.6 (Second wave fears)
2022	17.3	23.9 (Ukraine crisis)
2023	13.2	18.6 (Fed rate hikes)

Interpretation:

The highest volatility was observed in 2020 due to global uncertainty. Volatility gradually declined, indicating market stabilization.

5.4 Correlation with Macroeconomic Indicators

Indicator	Correlation with NIFTY 50
Inflation (CPI)	-0.42
Repo Rate	-0.37
FII Inflows	+0.63
GDP Growth	+0.58

Interpretation:

Higher inflation and interest rates have a mild negative impact on the market. FII inflows and GDP growth show a strong positive correlation with market performance.

6. Discussion:

The Indian capital market has shown remarkable adaptability in the face of major disruptions. Sectors like IT and Pharma outperformed during crises, while cyclical sectors recovered as economic sentiment improved. Increased retail participation and the digitization of trading platforms have also reshaped market dynamics. The negative correlation of inflation and interest rates with stock performance suggests that monetary policy plays a crucial role in market direction.

7. Conclusion:

From 2018 to 2023, the Indian capital market navigated through major disruptions but demonstrated consistent long-term growth. While short-term volatility persisted during crises, investor confidence remained strong. Secondary data indicates that macroeconomic stability, institutional inflows, and sector-specific catalysts significantly influenced market trends.

8. Recommendations:

- Investors should monitor macroeconomic indicators like inflation and repo rate closely.
- Portfolio diversification across defensive (Pharma, FMCG) and growth (IT, Banking) sectors is advisable.
- Long-term investing remains effective despite short-term volatility.
- Policy support from regulators should continue to boost transparency and digital participation.

9. Limitations

- The study relies purely on secondary data without investor sentiment analysis.
- Correlation does not imply causation; deeper econometric modeling can add more insights.
- Data from global indices or commodities (like crude oil) was not included.

10. References

- National Stock Exchange (www.nseindia.com)
- Bombay Stock Exchange (www.bseindia.com)
- SEBI Annual Reports (2018–2023)
- Reserve Bank of India Bulletins
- Yahoo Finance, TradingView
- Singh, R. (2021). Post-COVID Indian Stock Market Recovery
- Sharma, V. & Mehta, P. (2019). Sectoral Analysis of Indian Equity Markets.