

The Impact of Macroeconomic Factors on Stock Market Performance

Hriday Chainani and Shravani Dalvi

Jai Hind College (Empowered Autonomous), Churchgate, Mumbai, India

hacchainani@gmail.com and dalvi.shravani2808@gmail.com

Abstract: *The Indian stock market in its macro capacity is influenced by many factors, which can be direct or Indirect. The influence of these factors can be very huge or even very minute in nature to the volatility they bring to the Indexes of the market. These factors once studied and understood can help investors make a better decision regarding their portfolio. This study has gone into depth with help of case studies of the recent Trade war of 2025 which also helps understand the recent perspectives and the viewpoints brought forward regarding this topic. The study has also been made more encompassing in a macro perspective using two more case studies specifically based in India and how they have impacted the stock market Indexes as well. This has helped us understand the way how markets react to pecuniary matters and how they can be understood. There is also a survey done from which hypothesis testing is done to understand the statistical validity for the topic as well. The overall hypothesis testing result was that macroeconomic factor being a major influence on the stock market. This study also dwells into the past studies done regarding this topic hence making it prevalent in nature and also so that the understanding regarding this topic is thoroughly covered in this paper.*

Keywords: Indian stock market

I. INTRODUCTION

A stock market is a regulated marketplace where investors buy and sell shares of publicly traded companies. These equity securities represent fractional ownership in the issuing corporation. Price discovery occurs through continuous trading, reflecting market sentiment and assessments of corporate performance and future prospects. Stock markets facilitate capital formation for businesses and provide investment opportunities for individuals and institutions. As of December 2024, the National Stock Exchange (NSE) has 2,671 listed companies, and the Bombay Stock Exchange (BSE) has 5,571 listed companies. Taking into consideration the index as a parameter to check the performance of the stock market, as it wholly encompasses the top companies of the stock market overall. Thus, we shall take into account the performance of NIFTY and SENSEX which are the indexes of NSE and BSE respectively. In the last 25 years (from 1st Jan, 2000 to 1st Jan 2025), the NIFTY 50 total return index has given annualized returns of 11.23% CAGR, and SENSEX has given annualized returns of 11.39% CAGR. Thus, we can conclude that the stock market returns have been comparable to that of high return giving assets for eg. Gold or Real Estate.

The overall performance of a nation's economy, as reflected by its micro and macro economic indicators, directly influence investor sentiments and corporate profitability, thereby shaping the dynamics of the stock markets. There are many micro economic factors like company financials, management, competition, and industry trends which influence the securities markets. The macroeconomic factors being, GDP growth, inflation, exchange rates, interest rates, and government policies exert a broader influence on the stock market performance. A growing GDP fuels corporate earnings and investor confidence driving the market performance. A lower inflation rate increases the purchasing power of the people, driving more investments into the stock markets. Fluctuation in exchange rates impact import/export of products, and foreign investment flows, influencing market sentiments.

Thus, this paper will provide an in-depth analysis of the influence of macroeconomic factors on Indian stock market performance.



II. REVIEW OF LITERATURE

Keswani S, Puri V, & Jha R. (2024). This study examines the relationship between macroeconomic factors and the Indian stock market from 2009 to 2019. It analyzes NSE returns concerning disposable income, inflation (CPI), exchange rates, interest rates, government policies, FII, and GDP using statistical tests, including the ADF unit root test, VECM cointegration, and VECM Granger causality. Results indicate a significant long-term relationship between stock prices and macroeconomic variables. Disposable income, GDP, and FII positively impact Nifty, while exchange rates, interest rates, inflation, and government policies have negative effects. Short-term variations in Nifty are significantly influenced by macroeconomic factors, with GDP and inflation being key predictors.

Rakesh Kumar Verma & Rohit Bansal. (2021). This review examines the impact of macroeconomic variables on stock market performance using global literature. GDP, FDI, and FII had similar effects across countries, while other variables varied. During economic crises, variable impacts reversed. Sectoral indices showed sector-specific influences, with some variables affecting all sectors. The study highlights the importance of multifactor analysis, incorporating variables like revenue, investments, and deposit growth. Findings aid investors, businesses, and policymakers in making informed decisions. Future research should focus on investment goals and long-term data analysis, as suggested by Pearce and Roley (1988), to enhance stock market predictions and portfolio management strategies.

Keshav Garg & Rosy Kalra. (2018). This study examines the impact of six macroeconomic factors—unemployment rate, inflation, gold prices, GDP, exchange rate, and forex reserves—on the Indian stock market. Findings show that all factors influence stock market movements, with unemployment and inflation having an inverse relationship with Sensex, while others show a positive correlation. The 2000s and 2008 global recessions significantly impacted the Indian stock market due to declines in GDP and other macroeconomic variables. To enhance stock market returns and attract investors, policymakers must develop strategies that align with the macroeconomic framework, ensuring stability and growth in the Indian financial markets.

Kiran Kumar Kotha & Bhawna Sahu. (2016). This study examines the relationship between the Indian stock market and macroeconomic indicators using monthly data from July 2001 to July 2015. Johansen's cointegration and Granger causality tests assess long- and short-run dynamics. Results confirm one cointegrating vector between Sensex and exchange rate, money supply, WPI, and T-bill rate. WPI, money supply, and T-bill significantly influence the stock market in the long run. Bi-directional causality exists between Sensex and exchange rate, while inflation and money supply positively impact stock returns. Interest rates show an insignificant negative relationship, suggesting market inefficiency due to stock returns' cointegration with macroeconomic factors.

Dr Amit Hedau. (2024). This study examines the relationship between macroeconomic factors and NIFTY 50 performance. Findings indicate a moderate predictive power of macroeconomic variables on NIFTY, with stronger correlations to global events like the Dow Jones and exchange rates. A qualitative analysis suggests additional influencing factors, with expert opinions slightly diverging from quantitative data. The study's conclusions hold significant implications for developing economies like India. The author suggests that adopting these findings can help investors safeguard portfolios against market volatility and enhance performance. The research highlights the need for a comprehensive approach to understanding stock market dynamics in emerging markets.

III. RELEVANCE

This research paper provides a framework for making informed investment decisions by revealing how economic indicators like GDP growth, interest rates, and inflation influence stock prices. This helps the investors to strategically allocate assets, diversify their portfolios, and potentially time market entries and exits more effectively. Understanding macroeconomic trends offers more basis for investment than relying solely on market sentiments or short term fluctuations. This study will also divulge into the macroeconomic factors and the role they play in the economy. Interpreting this will help investors to develop long term investment strategies aligned with maximising returns and managing risk leading to more resilient portfolios.



IV. OBJECTIVES

- Understanding the impact of macroeconomic factors of stock market performance.
- To identify the macroeconomic factors that have the most significant impact on the stock market returns.
- To examine the relationship between macroeconomic factors and stock market performance.
- To understand case studies where macroeconomic factors have influenced the stock market performance.
- To understand the longevity of the impact of macroeconomic factors on stock market performance.

V. METHODOLOGY

When researching on this topic, a significant emphasis has been placed on gathering the primary data. Investor sentiment is a crucial consideration in this context. By directly engaging with the investors through surveys and interviews, researchers can gain valuable insights into how these macroeconomic factors are perceived and how they impact investor behaviour. Together with secondary data, encompassing investor thoughts and concerns, provides valuable information that can help investors develop strategies to mitigate the impact of these factors on their portfolio, such as adjusting asset allocation, diversifying investments, and employing risk management techniques.

VI. SECONDARY DATA

Case Study 1: Impact of Demonetization (2016) on the Indian Stock Market

On November 8, 2016, the Indian government, led by Prime Minister Narendra Modi, announced the demonetization of Rs. 500 and Rs1,000 currency notes, effectively removing 86% of India's cash in circulation overnight. The move aimed to combat black money, counterfeit currency, and corruption, but it led to widespread economic disruption, including stock market volatility.

Stock Market Reaction:

- On November 9, 2016, the BSE Sensex fell by nearly 1,689 points (6%) in early trade before recovering partially.
- The NSE Nifty 50 also plunged over 541 points amid panic selling.
- Sectors reliant on cash transactions, such as real estate, banking, and consumer goods, faced sharp declines.
- Macroeconomic Effects:

Short-Term:

- Consumer demand dropped significantly, impacting corporate earnings.
- The GDP growth rate fell from 8.2% in Q1 2016 to 5.7% in Q1 2017.
- Foreign investors withdrew over ₹50,000 crore from the stock market.

Long-Term:

- Increased adoption of digital payments boosted fintech companies.
- Formalization of the economy led to higher tax compliance and financial transparency.
- The stock market recovered within six months, with the Sensex crossing 30,000 points in April 2017.
- Case Study 2: Impact of COVID-19 (2020) on the Indian Stock Market
- The COVID-19 pandemic led to one of the worst global economic crises, and India was no exception. The first nationwide lockdown was imposed on March 24, 2020, halting business activities and disrupting the financial markets.

Stock Market Crash:

- On March 23, 2020, the BSE Sensex crashed by 3,935 points (13.15%), the biggest single-day fall in history.
- The NSE Nifty 50 dropped by 1,135 points (12.98%), leading to a lower circuit breaker halt in trading.

Key Economic Factors:

- Supply Chain Disruptions: Manufacturing and services sectors slowed, causing GDP contraction by 23.9% in Q1 2020.
- Massive Foreign Outflows: FIIs pulled out ₹1.1 lakh crore (\$14 billion), weakening the rupee.



- RBI's Monetary Stimulus: The central bank slashed repo rates to 4% and introduced a ₹20 lakh crore stimulus package.

Recovery and Growth:

- Market sentiment improved post unlock phases and vaccine rollouts.
- By November 2020, Sensex crossed 44,000, driven by tech and pharma stocks.
- Case Study 3: India's Trade Crisis (2024–2025) and Macroeconomic Impact
- India faced a major trade crisis in 2024–2025 due to global protectionist policies, currency depreciation, and rising crude oil prices. These factors widened the trade deficit and hurt export-driven industries.

Macroeconomic Factors:

U.S. & EU Trade Barriers – The U.S. imposed tariffs on Indian exports, especially automobiles and agriculture, leading to a projected \$7 billion loss. The EU's carbon tax further raised compliance costs for Indian exporters.

Rupee Depreciation – The rupee fell to ₹88 per U.S. dollar, making imports costlier. Foreign investors withdrew \$1.4 billion, worsening market sentiment.

Rising Crude Oil Prices – Oil prices surged beyond \$100 per barrel due to Middle East tensions, increasing India's import bill and inflation.

Impact:

Trade deficit hit \$24 billion (Q1 2025), the highest in a decade.

Stock Market Decline: Sensex dropped 4.2%, affecting steel, textiles, and IT sectors.

Industries Suffered: Steel exports declined, textiles lost EU buyers, and agriculture exports fell.

From its peak of 26,277.35 in September 2024, the Nifty fell approximately 14% by February 2025, marking its steepest consecutive monthly drop in nearly three decades. Similarly, the Sensex declined by about 12% from its peak during the same period.

Government Response:

India pursued export diversification, trade negotiations, and forex stabilization measures to curb the crisis.

VII. PRIMARY DATA

7.1. Hypothesis testing

Null Hypothesis (H_0):

Macroeconomic factors (inflation, interest rates, GDP, unemployment) do not significantly influence stock market performance.

Alternative Hypothesis (H_1):

Macroeconomic factors significantly influence stock market performance.

| A | B | C | D | E | F | G | H |
|-------------------------|---------------|----------|-----------|---|---|---------------------------|------------------------|
| OBSERVED | Yes | No | Row total | | | | |
| High tax barrier | 46 | 13 | 59 | | | | |
| Medium Taxation Barrier | 13 | 17 | 30 | | | | |
| Low Taxation Barrier | 1 | 9 | 10 | | | | |
| Column total | 60 | 39 | 99 | | | | |
| EXPECTED | Yes | No | | | | Statistic | Value |
| High tax barrier | 35.75758 | 23.24242 | | | | Degree of Freedom | 2 |
| Medium Taxation Barrier | 18.18182 | 11.81818 | | | | Level of Significance | 0.05 |
| Low Taxation Barrier | 6.060606 | 3.939394 | | | | Table value of Chi-Square | 5.99 |
| | | | | | | Computed Chi-Square | 21.92284 |
| | | | | | | Decision | Reject Null Hypothesis |
| CHI SQUARE CALCULATION | $(O-E)^2 / E$ | | | | | | |
| High tax barrier | 7.447458 | | | | | | |
| Medium Taxation Barrier | 3.748846 | | | | | | |
| Low Taxation Barrier | 10.72654 | | | | | | |



As the computed value (21) is more than table value (5.9), we reject the null hypothesis and accept the alternate hypothesis. This proves that macroeconomic factors significantly influence stock market performance.

7.2. Summary

Macroeconomic factors, including inflation, interest rates, GDP growth, and unemployment, significantly influence stock market performance. Investors closely monitor these indicators to assess potential risks and opportunities. Understanding their impact helps in making informed decisions, shaping market trends, and predicting future movements in stock prices effectively.

Inflation is widely considered one of the strongest factors affecting stock market trends. Rising inflation erodes purchasing power, increases costs for businesses, and impacts corporate profitability. Investors react by adjusting portfolios, often favoring assets like commodities or inflation-protected securities to mitigate risks and preserve returns. Interest rates play a crucial role in shaping investment decisions and stock valuations. When rates rise, borrowing becomes expensive, reducing corporate expansion and consumer spending. Lower rates encourage investments, driving stock prices higher. Central bank policies and rate adjustments significantly impact market sentiment, influencing investor behavior.

Investors generally perceive inflation rates as moderate, falling between two to five percent. A stable inflation rate is seen as healthy for economic growth, but sharp increases trigger market volatility. Persistent high inflation diminishes real returns, prompting cautious investment strategies and shifts toward defensive sectors or assets.

Market volatility has been reported as both high and low, depending on individual experiences. Some investors witnessed stable trends, while others observed sharp fluctuations. Factors like global events, economic policies, and investor sentiment contribute to volatility, making risk management essential for navigating uncertain market conditions successfully.

Many investors adjust their decisions based on macroeconomic indicators such as inflation, GDP growth, and interest rates. Strategic portfolio adjustments help mitigate risks and capitalize on emerging trends. Awareness of economic shifts enables proactive investing, allowing investors to adapt strategies and optimize long-term financial outcomes.

Confidence in understanding macroeconomic influences varies among investors. Some feel highly knowledgeable, applying economic insights to investment strategies, while others struggle with complexity. Education, experience, and market exposure play key roles in shaping confidence levels, impacting investment decisions and responses to economic changes in financial markets.

VIII. LIMITATIONS

- Majority of the investors who filled the form were from the city of Mumbai, which might show a major disparity for overall consideration.
- No case studies pertaining to this theme could be found.
- The topic of the study is too comprehensive to cover each aspect in depth, and the time resources available are always subject to certain limitations.
- Primary data is collected only using questionnaire methods.
- Macroeconomic factors are influenced by unpredictable global events, making it difficult to establish consistent patterns in stock market performance.

IX. CONCLUSION

The impact of macroeconomic factors on stock market performance is a crucial area of study for investors, policymakers, and financial analysts. This research highlights how key macroeconomic indicators such as GDP growth, inflation, interest rates, exchange rates, and foreign direct investment significantly influence stock market movements. The findings suggest that a stable macroeconomic environment fosters investor confidence, leading to market growth, while economic uncertainty can trigger volatility and declines.



The study also reveals that stock markets in emerging economies, like India, are particularly sensitive to global economic trends and foreign institutional investments. This paper has used demonetization, COVID-19, and India's trade issues in our primary data to analyze their effects on market performance. Cointegration analysis further confirms long-term relationships between stock indices and macroeconomic variables, reinforcing the importance of economic policies in shaping market trends.

In conclusion, understanding the interplay between macroeconomic factors and stock markets is essential for informed decision-making. Policymakers should aim for economic stability, while investors should incorporate macroeconomic indicators into their market strategies.

This research reaffirms that macroeconomic factors do have a significant impact on stock market performance, influencing both short-term volatility and long-term growth trends.

REFERENCES

- [1]. Keswani, S., Puri, V., & Jha, R. (2024). Relationship among macroeconomic factors and stock prices: Cointegration approach from the Indian stock market. *Cogent Economics & Finance*, 12(1), 2355017. <https://doi.org/10.1080/23322039.2024.2355017>
- [2]. Verma, R. K., & Bansal, R. (2021). Impact of macroeconomic variables on the performance of stock exchange: A systematic review. *International Journal of Emerging Markets*, 16(7), 1291–1329. <https://doi.org/10.1108/IJOEM-11-2019-0993>
- [3]. Garg, K., & Kalra, R. (2018). *Impact of macroeconomic factors on the Indian stock market*. Parikalpana - KIIT Journal of Management, 14(1), 134-135. <https://ksom.ac.in/wp-content/uploads/2018/06/134-135-Keshav-Garg-Rosy-Kalra.pdf>
- [4]. Kotha, K. K., & Sahu, B. (2016). Macroeconomic factors and the Indian stock market: Exploring long and short run relationships. *International Journal of Economics and Financial Issues*, 6(3), 1081–1091. <https://www.econjournals.com/index.php/ijefi/article/view/2328>
- [5]. Hedau, A. (2024). *Impact of macroeconomic variables on the performance of the Indian stock market*. *Journal of Informatics Education and Research*, 4(1), 886–900. <https://jier.org/index.php/journal/article/view/655>

