A Study on Impact of Inflation on NIFTY 50 Index

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Abstract

In the current state of the global financial market, nearly every nation appears to have a stock exchange that represents the financial stability of its own economy. Inflation is the process by which prices grow over time and reduce buying power. Inflation is a multidimensional beast that can have both beneficial and bad impacts. The National Stock Exchange of India Ltd.'s flagship index is the NIFTY 50. It is an index that shows the mean of the top 50 Indian businesses that are listed on the National Stock Exchange. The main purpose of this study is to determine the effect of inflation on NIFTY 50 index. The study is descriptive in nature. Various sources, including books, articles, journals, and websites of different government agencies, are used to obtain secondary information. The influence of inflation on the NIFTY 50 is intricate and subject to change based on several variables. Investors who want to manage the possible effects of inflation on their NIFTY 50 investments should take into account these different factors and use a diversified approach.

Keywords

NIFTY 50, Inflation, Investments, Stock, and Economic.

1. Introduction

Inflation is defined as a sustained increase in the average price of goods and services over time in an economy. Inflation is a measure of a reduction in purchasing power per unit of money since rising prices allow each unit of currency to purchase fewer products and services. The inflation rate, defined as the annualized percentage change in an overall cost over time (usually the CPI), is a major indication of price inflation. Most economists now advise for a mild and stable pace of inflation. Low inflation, which is comparable to zero or negative inflation, reduces the likelihood that monetary policy and liquidity would prevent the economy from stabilizing and mitigates the severity of economic downturns, allowing the labor market to respond more swiftly. The monetary authorities are normally tasked with keeping inflation low and stable.

The National Stock Exchange (NSE), founded in 1992 as a tax-paying company, was officially recognized as a stock exchange in 1993 under the Securities Contracts (Regulation) Act, 1956, which was enacted during the tenures of P. V. Narasimha Rao as Prime Minister of India and Manmohan Singh as Finance Minister. In June 1994, NSE began operations in the Wholesale Debt Market (WDM) sector. The National Stock Exchange of India Ltd.'s main index is the NIFTY 50. It is an index that represents the average of the top 50 Indian businesses listed on the National Stock Exchange. Inflation is the rate at which general prices for goods and services rise, and it has the potential to alter monetary policy as well as reduce buying power. In the context of equities markets such as the NIFTY 50, inflation is often seen unfavourable since it raises corporate input prices, reduces profit margins, and eventually lowers earnings (Modigliani & Cohn, 1979). However, the impacts are complex and vary depending on the industry and business.

1.1. How Inflation Directly Affects the NIFTY 50

1.1.1. Cost of Borrowing: In response to inflation, the Reserve Bank of India (RBI), the nation's central bank, often raises interest rates to mitigate rising prices (Mishkin, 2007). This uptick in interest rates leads to heightened borrowing expenses for businesses, impacting their expansion and growth plans. Such circumstances pose a negative factor for NIFTY 50 companies, predominantly comprising large enterprises necessitating significant capital expenditures.

1.1.2. Corporate Profits: NIFTY 50 entities operating under fixed-price contracts or those unable to adjust customer charges may experience a reduction in profit margins. Sectors with limited pricing power, such as consumer goods or utilities, are particularly susceptible (Fama & Schwert, 1977).

1.1.3. Stock Valuations: Inflation exerts an influence on stock values. Typically, higher inflation correlates with lower price-to-earnings ratios (P/E ratios). This tendency stems from investors anticipating elevated discount rates applied to future company earnings and demanding a higher risk premium amidst an economically unstable climate (Barro, 1990).

2. Review of the Literature

- Luthra and Mahajan (2014) In their study, investigated how macroeconomic factors such as GDP growth rate, gold prices, inflation, and exchange rates affected BSE Bankex. They found through their regression research that the banking index was positively impacted by GDP growth rate, inflation, and exchange rates, but negatively impacted by gold prices on BSE Bankex. On bank stock prices, these factors had negligible effects.
- Gurloveleen & Bhatia (2015) examined the effects of a number of economic factors, including trade balance, foreign institutional investors (FIIs), call money rates, inflation, foreign currency reserves, and gross fiscal deficit. The results of their multiple regression, Granger Causality, and ADF tests revealed that FIIs and currency rates had the biggest effects.
- Ms. Aanchal (2017) identified links of causality between macroeconomic variables and stock indexes. The study found no causal relationship between stock exchange indices and the macroeconomic variables it looked at using the Unit Root Test, ADF Test, Granger Causality Test, and correlation analysis. Furthermore, CNX Nifty 50 was found to positively correlate with other macroeconomic measures, including GDP, imports, exports, inflation, and investment.
- Garg and Kalra (2018) investigated how macroeconomic factors affected the Indian stock market between 1991 and 2017. With the exception of unemployment and inflation, they found a positive association between GDP, gold prices, foreign exchange rates, and the Sensex.
- Megaravalli and Sampagnaro (2018) examined the connections, both immediate and long-term, between major macroeconomic indicators like inflation and exchange rates and the securities exchanges in China, Japan, and India. Monthly series data from January 2008 to November 2016 were used in the study. Based on the pooled assessed consequences of the three ASEAN countries, the swapping scale, or exchange rate, has a favourable and considerable long-term impact on securities exchanges. On the other hand, the long-term effects of inflation are negative and insignificant. There isn't an objectively substantial association between macroeconomic indicators and securities exchanges for the foreseeable future.
- Krishna Gadasandula (2019) examined the connection between the Indian stock market and macroeconomic factors. The augmented Dickey Fuller (ADF) unit root tests, Zivot-Andrews (ZA), Philips-Perron (PP), Granger and Geweke causality tests, and the Johansen-Julius co-integration test are

employed. The findings demonstrate that there are one-way causal links in the situations of GDP and inflation, bank rate and GDP, exchange rate and GDP, NIFTY Index and GDP, exchange rate and inflation, and bank rate and NIFTY Index, respectively.

- Sahoo, Patnaik, & Satpathy (2020) investigated the links between and effects of a few macroeconomic variables on the American and Indian stock markets. The ANNOVA, t-test, and regression models were applied. The research shows that GDP and GDP per capita have statistically significant effects on the BSE SENSEX, while inflation and interest rates have no effect. On the other hand, all of the macroeconomic variables have statistically significant individual correlations with the stock markets of both nations.
- Ashoka and Hamid (2021) explored how the exchange rate and inflation affected the macroeconomic factors, namely the National Stock Exchange's (NSE) Nifty 50 index, and the Indian stock market. A model of linear regression has been applied. The study's regression results show that the Indian stock market and inflation have a statistically significant negative association, whereas the growth of the Indian stock market is positively correlated with the GDP growth rate and the price of oil.

3. Objectives of the Study

The primary objectives of the study are:

3.1. The main purpose of this study is to understand the direct impact of inflation on the NIFTY 50 index.

3.2. To understand how through various channels, inflation affects the NIFTY 50 index.

4. Research Methodology

The present study is descriptive in nature. Various sources, including books, articles, journals, and websites of different government agencies, are used to obtain secondary information. This papers primary goal is to compile and combine existing knowledge in order to create a thorough understanding of the topic.

5. Discussion

Through a number of channels, inflation affects stock indices such as the NIFTY 50, influencing economic policy responses, company earnings, and investor sentiment. This is a thorough explanation of how inflation affects the NIFTY 50 Index, which serves as the primary performance benchmark for the Indian equities market:

5.1 Interest Rate and Discount Rate

Interest rates are the main mechanism via which inflation influences stock indexes. In order to prevent economic overheating and stabilize prices, inflation usually forces the central bank, in this case, the Reserve Bank of India (RBI) of India, to modify interest rates. A rise in interest rates by the RBI to fight inflation drives up the cost of borrowing for businesses. Reduced capital expenditure and lower profit margins can result from higher borrowing costs, especially for businesses with high levels of leverage or those operating in capital-intensive industries. Furthermore, the discount rates utilized in stock valuation models like the Discounted Cash Flow model also rise in tandem with higher interest rates. Stock prices may decline as a result of a rise in the discount rate since it lowers the present value of future cash flows. Since a wide variety of companies make up the NIFTY 50, an increase in discount rates across the board could cause the index as a whole to decline.

5.2 Sectoral Specific Impacts

Not every sector included in the NIFTY 50 is equally affected by inflation. For example:

Table 1:- Impact of Inflation on Different Sectors

Sector	Impact of Inflation	Key Factors	Sources
Agriculture and Food	Elevated food prices with double-digit increases in pulses, fruits, vegetables, and spices. Cereals and sugar prices increased by more than 6%.	Supply constraints, Weather disruptions, Harvest outcomes	RBI- Source 1, KPMG- Source 2
Manufacturing	Rising input costs with some expectations of decline. Higher selling prices are anticipated to offset costs.	Cost of raw materials, Supply chain issues	RBI- Source 1, RBI- Source 3
Services	Increased input costs lead to higher service charges. Persistent inflationary pressures.	Higher operational costs, Increased demand	RBI- Source 1, KPMG- Source 2
Construction and Real Estate	Rising material and labor costs impacting housing prices and construction expenses.	Cost of materials, Labor expenses	PwC- Source 4, KPMG- Source 2

Sector	Impact of Inflation	Key Factors	Sources
Financial Services	Higher borrowing costs due to elevated repo rate. Financial market stability challenges.	Tight monetary policy, Interest rate hikes	RBI- Source 1, RBI- Source 3
Consumer Goods	Price adjustments to manage input costs. Balancing market share and margins.	Input cost management, Competitive pricing	RBI- Source 3, KPMG- Source 2

Source:- Prepared by authors

Source 1: https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=57366

Source 2: https://kpmg.com/in/en/home/services/tax/india-interim-budget-2024/post-budget-sectoral-povs.html

Source 3: https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=21343

Source 4: https://www.pwc.in/publications/ceo-survey/27th-annual-global-ceo-survey-india-perspective.html

5.3 Inflation Expectations and Market Sentiments

The way the market acts can be significantly influenced by inflation expectations. Proactive selling may result from investors anticipating monetary tightening and higher interest rates if they believe inflation will increase. On the other hand, the response could be mild if the inflation is thought to be temporary. The NIFTY 50 can experience notable short-term fluctuations due to market psychology, which is separate from the underlying economic principles.

5.4 Global Economic Interactions

The NIFTY 50 comprises companies with substantial international business, so foreign exchange rates and worldwide inflation trends are also relevant. Companies with substantial import requirements may find that the cost of imported goods and services increases due to a weaker rupee during inflationary times. On the other hand, exporters stand to gain from a declining rupee since it will lower the cost of their products abroad.

Through a number of intricate pathways, inflation affects the NIFTY 50 in a variety of ways, affecting everything from investor sentiment and global economic interactions to company earnings and sector performance. Investors who want to manage the opportunities and volatility brought about by inflationary times in the economy must comprehend these dynamics. Furthermore, a sophisticated strategy that takes into account both sector-specific effects and general economic trends can support well-informed investment choices.

6. Conclusion

A multifaceted beast, inflation can have both positive and negative effects. The desirable aspect is that businessmen receive more value for their goods at high prices, which encourages them to produce more. The adverse outlook is that people are compelled to limit their purchases when prices soar, which may trigger a recession. Fears about inflation have the potential to affect investor sentiment towards stocks, particularly the NIFTY 50, and add to market volatility. Fears of inflation could fuel negative sentiment, which would encourage selling pressure on stocks, while positive sentiment would encourage buying. A certain threshold of inflation is necessary to encourage producers and businesses, even though absurdly high inflation can severely affect purchasing power. Value stocks are generally more appealing investments when inflation and interest rates rise because they typically have more stable fundamentals, pay higher dividends, and are less rate sensitive. In general, moderate inflation indicates a strong economy and boosts stock markets. To sum up, the influence of inflation on the NIFTY 50 is intricate and subject to change based on several variables. The index's performance during inflationary times is influenced by a number of factors, including sector dynamics, currency movements, and the outlook for economic growth, even though high inflation rates and tighter monetary policy may present difficulties. Investors who want to manage the possible effects of inflation on their NIFTY 50 investments should take into account these different factors and use a diversified approach.

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