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DOES INFLATION SPECIAL EFFECTSON THE SECTORIAL INDICES IN THE INDIAN STOCK MARKET? AN EMPIRICAL ANALYSIS

Dr. Jabir Moosa
Professor, MBA Department,
M.E.S College of Engineering, Kuttipuram, Kerala
(Affiliated to A.P.J Abdul Kalam Technological University, Kerala, India)

Mr Anil Kumar M
Research Scholar, Naipunnya Business School,
Affiliated to KUFOS, Madavana, Panangad, Ernakulam

Dr SURAJ E.S
Associate Professor,
Naipunnya Business School, Pongam, Koratty, Thrissur

Abstract: **In this study, the involvement of rate of inflation on the sectoral indices in the Indian Stock Market is investigated. Stock indices of various sectors and inflation rate are taken from secondary sources. Correlation is used for data analysis with the help of SPSS to verify whether the rate of inflation has any effect on stock prices. The results of the research shows that the rate of inflation has no direct effect on sectoral stocks, as there are other factors which cause variation in the price of sectoral stocks.**

Keywords: **Inflation, sectoral index, stock market**

I. INTRODUCTION

Even with its constantly expanding population, antiquated bureaucratic practices, nationalist movements led by various factions, and political squabbles within and between soirees, India is a respectable example of an emerging market in the world. It has made fantastic financial progress thanks to many administrators' changes that many administrators have declared. The Indian stock market is a good specimen of a multi-negotiator system that is rapidly evolving and generates a tonne of clearly defined and well-researched actualities. Due to the sheer amount of data, it is plausible to create enormous connection matrices through stocks that include information about the stock market. Economic hiccups have included crippling customs duties that prevented international investments, counterproductive tax levies, and the government's assertiveness that kept the economy, outside of the stock market, closed to foreigners.

Earlier research on stock market return behaviour was started by Fama (1981), who argued that markets are efficient when they accurately represent the underlying macroeconomic behaviour. Fama (1981) claimed that "efficiency" means a financial market considers all relevant information and produces the best result possible given the circumstances. His findings demonstrated a poor association between stock prices and inflation. When prices for commodities rise or more money is required to buy the same goods, inflation has occurred. The level of inflation determines the country's purchasing power because rising inflation will result in higher pricing for a variety of goods and services. In financial theory, the consumer price index, which really denotes an unprecedented growth in the cost of goods and services, is used to measure the inflation rate. The estimated inflation rate is an outcome that economists and individuals plan on year to year. If inflation is expected, individuals are less likely to store cash because the value of money depreciates over time as a result of inflation while unexpected inflation mostly causes wealth to be transferred from borrowers to lenders. Nevertheless, the unexpected inflation is greater than what economists and consumers anticipated, and its impacts are far more detrimental than those of the anticipated inflation. High inflation signals an economic downturn, so companies sell stock.

The law of supply states that stock prices should fall as the supply of the asset increases. Since stocks represent a company's potential future earnings, a downturn in the economy may prompt companies to sell off their financial stock holdings; as a result, rising inflation and low stock prices frequently coexist. Increasing inflation has a negative impact on the economy since it causes people to purchase significantly fewer items, reduces corporate profits, and slows down the nation's Gross Domestic Product. For those

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who analyse the performance of stocks over an extended period of time, inflation poses a significant challenge. The stock will lose more than ninety-five per cent of its real value if the authorities are unable to manage inflation. In periods of inflation, dividends rarely keep pace with increases in consumer prices, and pay-outs fall in real terms, further diminishing investor total return, as explained by Taylor (1996). From a policy perspective, the correlation between inflation and stock market prices has significant significance. Inflation affected the U.S. stock market by two per cent to five per cent since World War II. Due to the inability of stocks and other financial assets to keep up with inflation or hyperinflation, practically every country in the globe witnessed real stock market falls. This caused stock market volatility.

If firms are net borrowers, unexpected inflation may enhance their equity, leading to a positive link between inflation and stock prices (Ioannidis et al., 2005). In the affluent world, the stock market dominates the real economy, but in developing economies it looks superfluous because it is controlled by a few people (Chakravarty and Mitra, 2010). High inflation, according to a study by Faiza Saleem, Laraib Zafar, and Bisma Rafique, can have a negative impact on asset returns in two ways. First, it may slow down future economic activity and reduce corporate profit, which would have a negative impact on asset returns. Second, if inflation rises, risk rises along with it, resulting in an investor receiving a return over their expectations at a larger risk. (Evidence from Pakistan, 2013: Long-term connection between Inflation and Stock Return). According to the adaptive expectation school (Birol, 2013), there is a short-run trade-off between the pace of inflation and the unemployment rate. The rational expectation school, however (Muth, 1961), disproves this beneficial effect of price increases on output and employment. Sayed Farrukh Ahmed, K.M. Zahidul Islam, Md. Rahat Khan has opined in their study: Relationship between Inflation and Stock Market Returns: Evidence from Bangladesh (2015), that the policymakers, financial experts, and academics all need to understand the dynamic relationships between stock prices and monetary factors including the money supply, interest rate, and inflation rate. Amit Kumar Jha and Sweta Tiwari, in their research, The Effect of Inflation Rates on the Stock Price: Evidence from the Indian Market, made comments (2020) that the largest error investors make nowadays is investing without considering the rate of inflation. Since India has become a republic, the worth of one dollar has increased exponentially against the INR due to rising Indian inflation, which means that INR devaluation implies lower purchasing power, lower profitability, and lower return on investment. The impact that the rate of inflation has had on the sectoral equities traded on the Indian Stock Market is the topic of investigation in this study.

II. REVIEW OF LITERATURE

Various economies experience different effects of inflation rates on stock values, although previous studies have shown that there is no apparent connection between unexpected inflation and stock prices. Prior empirical investigations shown a negative association between inflation and stock movement in a number of nations, including Brazil, Europe, and the United States. According to the empirical findings, there is a unidirectional causal relationship between the stock and currency markets in all advanced nations, but not in emerging economies. They used differences in the structure and traits of these groups' financial markets to explain why advanced economies and emerging economies produced different results.

A large inverse association between the stock market and inflation was discovered by **Fama** and **Schwert** in 1977. **Feldstein** (1980) used corporate income taxation, cost depreciation, and the taxation of nominal capital gains to illustrate the impact of inflation on stock prices. According to Feldstein, stock prices rise when the inflation rate is high and consistent, and they decline when the anticipated inflation rate increases. In his opinion, the stock price to real profits ratio will decline when future inflation expectations are higher because a higher inflation rate will result in an increase in the effective tax rate on a company's source of income. **Aggarwal** (1981) examined the effect of exchange rate variations on US stock prices using monthly time series data for the floating rate period between 1974 and 1978 and found a positive correlation between stock prices and exchange rates. The Fisher Effect is opposed by **Fama's** (1981) Proxy Hypothesis, which contends that there exists a negative correlation between stock market gains and inflation. It claims that the negative correlation between real output and inflation and the positive causal association between real output and stock returns are what cause this relationship to be negative. According to Fisher's hypothesis, sometimes known as the “Fisher Effect”, the expected rate of return should be made up of both a real return and an anticipated rate of inflation. According to the theory, there will be a positive correlation between stock market returns, anticipated inflation, and anticipated inflation changes. According to Fama, the "proxy effect" vanishes if inflation does not cause a decline in real economic activity. The "proxy effect" refers to the negative correlation between stock returns and inflation that results from a decline in actual output and shows how inflation has a detrimental impact on real economic activity. The positive correlation between stock returns and fundamental factors that affect equity values, such as capital expenditures, the average real rate of return on capital, and firm productivity, explains why there is a negative association between stock returns and inflation. Contrarily, if you classify stocks or securities as capital commodities, inflation regards these items as similar to other goods, such as industrial and

agricultural products. To put it simply, rising inflation should raise the price of both general goods and securities. This thesis is undoubtedly tenable and is backed by strong empirical data. Fama's empirical findings still raise some questions, though. The negative correlation between inflation and stock returns was not totally eliminated by any one indicator of real activity.

Schwert (1981) investigated the daily returns of Standard and Poor's surrounding the CPI announcement and found a negative market reaction to the CPI's surprise inflation component. The main justification for anticipating a correlation between stock returns and unexpected inflation was that unexpected inflation contained new information about expected inflation levels in the future, according to Schwert, who examined how stock prices responded to the new information about inflation. The unexpected increase in predicted inflation may prompt government authorities to act by altering monetary or fiscal policy to combat rising inflation. Unexpected inflation has a number of implications on the firm's value. According to **Ross's** (1987) Efficient Market Hypothesis, a market is efficient with regard to the following information if trading on the basis of such an information set makes it impossible to make potential gains. As a result, no arbitrage opportunities can be taken advantage of using ex-ante information because all of the available information has already been discounted in current market prices. **Kaul** (1987) discovered some evidence in favour of the proxy theory. When **Mukherjee** (1987) used Akaike's final prediction together with a Vector Auto regression Model (VAR) on Indian data from 1948 to 1984, he discovered that there was a strong causal association (in the sense of Granger, 1969) between stock returns and macroeconomic variables. Inflation and stock values did not significantly correlate, according to **Hardouvelis** (1988). **Jain** (1988) used hourly data for the Consumer Price Index announcement and discovered a negative impact on stock prices and trading volume. In Indian stock markets, Poterba & Summers (1988) discovered evidence of mean reversion, which deviates from random-walk behaviour. In his seminal essay, **Schwert** (1989) examined the relationship between stock market volatility and the volatility of real and nominal macroeconomic variables and came to the conclusion that changes in inflation and real output have only mediocre predictive power for stock market volatility and return.

In post-World War II, **Lee** (1992) used a VAR approach to analyse the causal relationships and dynamic interactions among asset returns, real economic activity, and inflation in the USA. He discovered that stock returns help to explain the real economic activity, but they reveal little about the variation in inflation. Strong evidence in favour of a long-term positive link between nominal stock return and inflation was discovered by **Boudoukh** and **Richardson** (1993).According to **Robert** and **Vittorio** (1994), inflation has a multifaceted effect on a nation's economy. On the one hand, it reduces the purchasing power of domestic consumers, and on the other, it highlights variances in stock market returns by upsetting investors' expectations. **Mukherjee** and **Naka** (1995) used a Vector Error Correction Model (VECM) that covered 240 monthly observations for each variable from January 1971 to December 1990 to assess the impact of stock prices on six macroeconomic variables. In contrast to the mixed link between Tokyo stock prices and inflation and interest rates, they discovered a positive relationship between Tokyo stock prices, the exchange rate, the money supply, and industrial production. **Naka**, **Mukherjee** and **Tufte** (1996) analyzed the rapport between macroeconomic variables and the stock market of India. **Ajayi** and **Mougoue** (1996) used daily data from 1985 to 1991 to examine the correlation between exchange rates and stock indices for eight advanced economies. The study's findings indicate that these two financial markets have strong short- and long-term feedback relationships. The value of the native currency is impacted by stock price changes both in the short and long term.In their studies **Solnik** and **Solnik** (1997) showed the relationship between stock returns and inflation over lengthy time horizons and noted growing support for the Fisher hypothesis over time. **Abdalla** and **Murinde** (1997) inspected the relationships between the stock prices-exchange rate in the emerging stock markets of India, Pakistan, Korea, and the Philippines with the help of monthly data from 1985 to 1994.In order to study the causal relationships between stock returns and changes in exchange rates for seven advanced markets from 1985 to 1991 and eight Asian emerging markets from 1987 to 1991, **Ajayi** et al. (1998) used the daily market indexes and exchange rates. **Zhao** (1999) examined the relationships between output, inflation, and stock prices in the Chinese economy from March 1993 to March 1998 and found a significant and negative relationship between inflation and stock prices as well as information about how output growth significantly and negatively affects stock prices. Using monthly U.S. data from 1955 to 1998 and a VAR model to analyse the dynamic interdependencies among real economic activity, inflation, stock returns, and monetary policy, **Park** and **Ratti** (2000) found that shocks caused by monetary tightening generated statistically significant changes in both inflations and expected real stock returns, and that these changes are not found in the opposite directions. During the 1980s and 1990s, **Choudhry** (1999) looked into the connection between stock returns and inflation in four high-inflation Latin and Central American nations: Argentina, Chile, Mexico, and Venezuela. He discovered that for Argentina and Chile, there is a direct one-tone relationship between the current rate of nominal returns and inflation. Using a Vector Error Correction Model that covered the years 1988 to 1995, **Maysami** and **Koh** (2000) investigated the dynamic relationships between Singapore stock markets and macroeconomic variables such as the exchange rate, long- and short-term interest rates, inflation, money supply,

domestic exports, and industrial production. They discovered that all of the macroeconomic variables have co integrating relationships with changes in the levels of Singapore's stock market.

Nieh and **Lee** (2001) used the daily closing stock market indices and foreign exchange rates for the period from October 1, 1993, to February 15, 1996, to examine the relationship between stock prices and exchange rates for the G-7 countries. They discovered that there is no long-run equilibrium relationship for any of the G-7 countries. In their study of the Nigerian stock market, **Ralph** and **Eriki** (2001) discovered a negative correlation between stock prices and inflation as well as the stock prices' strong ties to the GDP, interest rate, money supply, and financial deregulation. In their study of how inflation affects financial sector performance, **Boyd et al**. (2001) found a substantial negative nonlinear link between inflation and the growth of the banking sector as well as the activity of the equity markets. The slight influence that inflation has on bank lending and stock market growth gradually decreases as it rises. In their study of the correlation between the returns of stocks and Greece's inflation rate from 1985 to 2000, **Loannides**, **Katrakilidis**, and **Lake** (2002) suggested that the share market can act as an inflation hedge in accordance with Fisher's hypothesis. The study of whether the stock market had been a haven for investors in Greece used the Auto Regressive Distributed Lag Cointegration Technique in combination with Granger Causality to test the long- and short-run effects between the involved variables in addition to the direction of these effects. This resulted in the conclusion that the real stock market was immune to inflation pressures. Over the first sub-period, it was discovered that there was a long-run, adverse link between inflation and stock market returns, which was in line with Fama's theory. According to **Fifield**, **Power**, and **Sinclair** (2002), local and global economic factors account for the performance of emerging stock markets. Their findings show that fledgling stock markets can be explained by GDP, inflation, money, and interest rates. In their study of this relationship at the Athens Stock Exchange, **Apergis et al**. (2002) discovered an inverse correlation between inflation and stock prices. **Al-Khazali** (2003)
examined nine equities markets in three Asian nations—Australia, Hong Kong, and Indonesia—in order to test the generalised Fisher hypothesis. Fisher's hypothesis was disproved by Japan, South Korea, Malaysia, the Philippines, Taiwan, and Thailand, who claimed that real rates of return on common stocks and expected inflation rates were unrelated and that nominal stock returns varied in a one-to-one relationship with expected inflation rates. Inflation and other variables, according to **Davis** and **Kutan's** research from 2003, are poor indicators of dependent stock exchange volatility in emerging nations. According to **Mukhopadhyay** and **Sarkar's** (2003) systematic analysis of the returns on the Indian stock market before and after market liberalisation and the impact of macroeconomic factors on returns, real economic activity, inflation, money supply growth, foreign direct investment, and the NASDAQ index were important in explaining variations in Indian stock returns for the post-liberalization period since 1995. **Al-Rjoub** (2003) looked into how unexpected inflation affected stock returns in five the Middle East and North African nations: Bahrain, Egypt, Jordan, Oman, and Saudi Arabia. He found that all of the MENA nations saw a negative impact from unexpected inflation. With the Kuala Lumpur Stock Exchange Composite Index, **Islam** (2003) looked at the short-run dynamic adjustment and the long-run equilibrium connections between four macroeconomic variables, including the interest rate, inflation rate, exchange rate, and industrial productivity. He discovered that there was a positive correlation between the inflation rate and stock price supporting Hendry's approach. **Yusoff** (2003) discovered a negative correlation between inflation, stock prices, and money supply as well as a cointegration between monetary policy variables and stock prices. The aforementioned indicates that there are extensive lists of books on macroeconomic factors and stock prices.**Mysami, Howe**, and **Hamzah** (2004) find a correlation between inflation and stock returns. Other research suggests the exact opposite. The writers credit the government's proactive efforts to prevent price hikes during the 1997 financial crisis. Short-run and long-run interest rates have a positive and negative connection. The long-run interest rate provides as a superior proxy for the nominal risk-free component used in stock valuation models and potential proxy values for expected inflation in the discount rate.
In Australia, Hong Kong, Indonesia, Japan, South Korea, Malaysia, the Philippines, Singapore, and Thailand, **Al-Khazali** and **Pyun** (2004) found a positive association between stock prices and inflation. This research reveals negative short-run connections between real stock returns and inflation, but long-run cointegration tests show a positive association. Stock prices in Asia, like those in the U.S. and Europe, appear to reflect a time-varying memory of inflation shocks, making stock portfolios a strong long-term inflation hedge. Employing advanced econometrics techniques such as cointegration, causality, and error methods such as bivariate and multivariate Vector Autoregressive or multivariate Vector Error-Correction models, **Laopodis** (2005) examined the dynamic interaction between the equity market, economic activity, inflation, and monetary policy and looked into the first issue regarding the role of monetary policy. He discovered that the real stock returns-inflation pair weakly supports a negative correlation. Using the Exponential General Auto-Regressive Conditional Heteroskedastic model to account for stochastic variation and asymmetries in the financial instruments, **Abu** (2005) investigated the fluctuating volatility dynamics of inflation rates in Malaysia during the period from August 1980 to December 2004. **Vuyyuri** (2005) showed cointegration and

causality between financial variables such as interest rates, inflation rates, exchange rates, stock return and real sectors using monthly observations from 1992 to 2002. Johansen's Multivariate Cointegration Test supported long-run equilibrium between the financial and real sectors, while the Granger test showed unidirectional Granger causation. **Engle** and **Rangel** (2005) discovered that GDP growth, short-term interest rates, and inflation have a significant positive impact on unconditional stock exchange volatility. They also discovered that inflation has higher predictive power for developing markets than it did for developed countries like Canada. The Athens Stock Exchange General Index is linked to five macroeconomic parameters, according to **Patra** and **Poshakwale** (2006). They studied short-run dynamic adjustments and long-run equilibrium links in the expanding Greek stock market from 1990 to 1999. Lagged inflation money supply, and trade activity affected the Athens stock returns. The Granger Causality Approach was employed by **Ratanapakorn** and **Sharma** (2007) to look at the long- and short-term correlations between the S&P 500 and six macroeconomic variables between 1975 and 1999 and discovered that the long-term interest rate was negatively correlated with stock prices, whereas the money supply, industrial production, inflation, the exchange rate, and the short-term interest rate were all positively correlated. According to Granger Causality, any macroeconomic situation affects stock prices over the long term. As per research by **Gan**, **Lee**, **Yong**, and **Zhang** (2006), there is a long-term association between stock prices and macroeconomic variables in New Zealand, including the long- and short-term interest rate, inflation rate, exchange rate, GDP, money supply, and domestic retail oil price. In this study, it is discovered that the inflation rate has a negative effect on stock values. No correlation exists between inflation and stock prices at the Athens Stock Exchange, according to **Hondroyiannis** et al. (2006), regardless of whether it is temporary or permanent inflation. A study on the interactions between France, Germany, Italy, and the United Kingdom was carried out by **Jung et al**. (2007) and found that the expected and unexpected inflation had an impact on actual stock returns in France, Italy, and the UK. Real stock returns only don't change with inflation in Germany. **Tettey** (2008) showed that inflation has a detrimental impact on stock returns. Using quarterly data covering the years 1991 to 2007 and the consumer price index as a gauge of inflation, Adam and **Tweneboah** (2008) investigated the relationship between macroeconomic factors and stock returns. They used the co-integration test and the vector error correction model (VECM) as analytical techniques and discovered that lagged inflation values have a negative and significant impact on the stock market. **Mahmood** and **Dinniah** (2009) tested the association between stock price and three macroeconomic variables, including inflation, output, and exchange rates of six Asian-Pacific nations, using the Engle-Granger Test and Johansen and Juselius' Maximum Likelihood Approach. Except for the relationships between foreign currency rates and stock prices in Hong Kong and between real output and stock prices in Thailand, analysis disproved the existence of any short-run relationships between any of the variables in any of the examined nations. Using Exponential Generalized Autoregressive Conditional Heteroskedasticity (EGARCH) and Lag-Augmented Var (LA-VAR) models, **Xiufang Wang** (2010) examined the time-series relationship between stock market volatility and macroeconomic variable volatility for China and discovered evidence of a bilateral relationship between inflation and stock prices.Stocks are a long-term buffer against inflation, according to **Alagidede** and **Panagiotidis'** (2010) investigation of the relationship between stock price and inflation for a few African stock markets. When **Arjoon, Botes, Chesang**, and **Gupta** (2010) examined the correlation between stock prices and inflation in South Africa, they discovered that real stock prices are not permanently impacted by changes in the inflation rate over the long term and that any short-term deviations in real stock prices will eventually be corrected back toward real stock prices.

Gupta and **Modise** (2011) calculated the predictive power of a few macroeconomic factors for South Africa and found that interest rates, the money supply, and world oil production economic expansion have some predictive power in the immediate term for in-sample forecasts, short-run predictability for out-of-sample forecasts, and strong out-of-sample predictive power for the inflation rate. **Chinzara** (2011) investigated the relationship between macro economic uncertainty and volatility in stock markets in South Africa and found that these two factors are significantly correlated, that financial crises increase stock market volatility, and that exchange rate and short-term interest rate volatility are the most significant determinants of stock market volatility, with volatility in the price of oil, gold, and inflation having less of an impact. For Brazil during times of high inflation, **Pimentel** and **Choudhry** (2014) give empirical evidence of the positive association between composite stock returns and inflation. All macroeconomic factors, according to **Kulathunga** (2015), may affect how the stock market develops. More specifically, the development of Sri Lanka's stock market has been constrained by the country's unstable inflation and exchange rates, as well as higher deposit rates. The impact of inflation on the US stock market from 1791 to 2015 was thoroughly examined by **Antonakakis, N**. (2016). He used a dynamic conditional correlation method to examine the relationship that changes over time between inflation and the stock market. They noticed that, aside from the 1840s, 1860s, 1930s, and 2011, inflation had a largely negative effect on other time periods. The dynamic conditional association of stock prices and inflation in the United States across the time period was explored by Antonakakis et al. (2017). **Simbolon** and **Purwanto** (2018) discovered that the

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stock price is significantly impacted by a composite of variables including interest rate, inflation rate, exchange rate, and GDP growth rate. A partial test shows that GDP growth rate is not significant, however interest rate, inflation rate, and exchange rate had substantial effects on stock price. **Eldomiaty**, T. (2019) used quarterly data for non-financial listed companies on the NASDAQ100 for the years 1999 to 2016 to analyse the effects of inflation and interest rates on stock prices in the Egyptian market. Various statistical tools, such as the cointegration test, linearity test, and normality test were used. Granger causality, among other theories, was used to investigate the causal link between inflation, interest rates, and stock prices. The results demonstrated a strong correlation between these macroeconomic variables and stock prices. The effects of inflation on industries like energy, real estate, banking, FMCG, etc. were scrutinised by **Singh**, G (2020) by examining changes in stock returns, that used average abnormal return, cumulative abnormal return, and cumulative average abnormal return. He came to the conclusion that there is no reaction in the Indian stock market following inflation announcements. According to statistically significant findings by **Amit Kumar Jha** and **Sweta Tiwari** (2020), the inflation rate has a detrimental effect on stock values. When compared to industries that provide vital goods and services, its influence on non-essential and luxury sectors is noticeably greater.

III. RESEARCH GAP

A great number of scholars have shown in the past, that the pace of inflation has a significant impact on the market-wide equities that are traded in stock markets all over the globe. The vast majority of research, on the other hand, is focused on western contexts; the very little study is carried out in Indian settings. For the benefit of future investors, decision-makers, and businesses, research needs to concentrate on how the rate of inflation influences the performance of individual sectors' stock prices. Within the context of the Indian stock market, this study investigates how well the rate of inflation factors into the forecasting of future stock values.

Scope and objectives of the study

In the future, investors, policymakers, and businesses will all benefit greatly from research that investigates the rate of inflation, sectoral stocks, their link, and the effects of decisions made about stock prices. The findings of the study have had a significant impact on the method that is used to anticipate future stock values by analysing the rate of inflation, and this change was brought about as a direct result of the findings of the study. The primary objective here is to establish whether or not inflation will have an effect on the stock market. The secondary objective is to identify the factors that may be responsible for the phenomenon of inflation while simultaneously mitigating its effects.

Hypothesis Testing and analysis

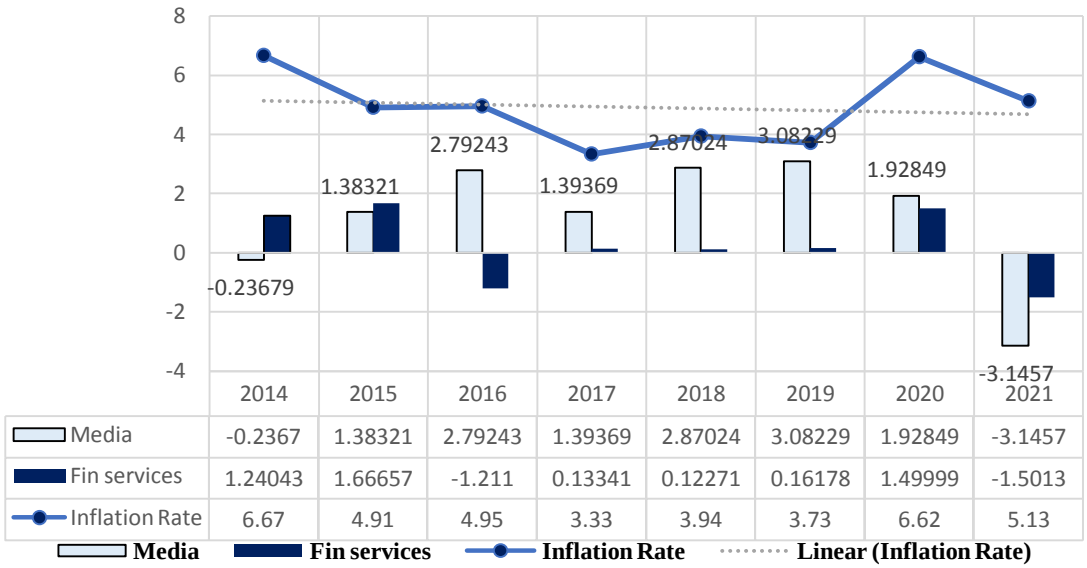
The study used information from RBI data sources, such as the inflation rate and stock indices, including price changes in the media, pharmaceuticals, financial services, banking, metal, FMCG, autos, and IT companies. The study used data from 2014 to 2021 (inclusive of both years). The alternative hypothesis (H1) was that the rate of inflation has a significant impact on sectoral stocks in the Indian stock market, contrary to the null hypothesis (H0), which claimed that there is no significant relationship between the rate of inflation and sectoral stocks in the Indian stock market. With the use of SPSS, results were analyzed using Kendall's tau-b correlation.

Statement showing P-values	
Variables	**Kendall's Tau_b**
Inflation Rate and Media companies	0.138
Inflation Rate and Pharmaceuticals	0.322
Inflation Rate and Financial Services	1.000
Inflation Rate and IT Companies	0.621
Inflation Rate and Banking Companies	0.805
Inflation Rate and Metal Companies	0.805
Inflation Rate and FMCG	0.216
Inflation Rate and Automobiles	1.000

Given that each of the p-values is greater than 0.05, we are compelled to accept the null hypothesis, which suggests that the rate of inflation does not have a significant impact on the sectoral equities that are traded on the Indian stock market. This conclusion is reached due to the fact that we are obliged to accept the null hypothesis.

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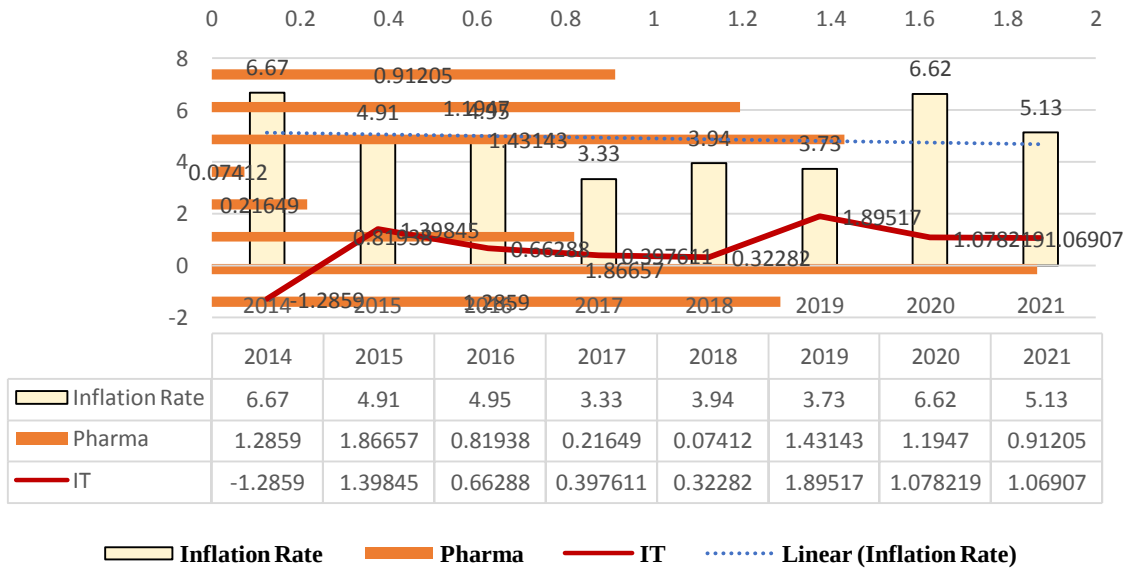
Diagram-1 Inflation Rate, Media and Financial Services



	2014	2015	2016	2017	2018	2019	2020	2021
Media	-0.2367	1.38321	2.79243	1.39369	2.87024	3.08229	1.92849	-3.1457
Fin services	1.24043	1.66657	-1.211	0.13341	0.12271	0.16178	1.49999	-1.5013
Inflation Rate	6.67	4.91	4.95	3.33	3.94	3.73	6.62	5.13

The graph shows the statistics for the inflation rate, media and financial services stock market indexes from 2014 to 2021. The frequency curve displays the inflation rate for the specified years, while the bar diagrams compare media and financial services (Diagram-1).

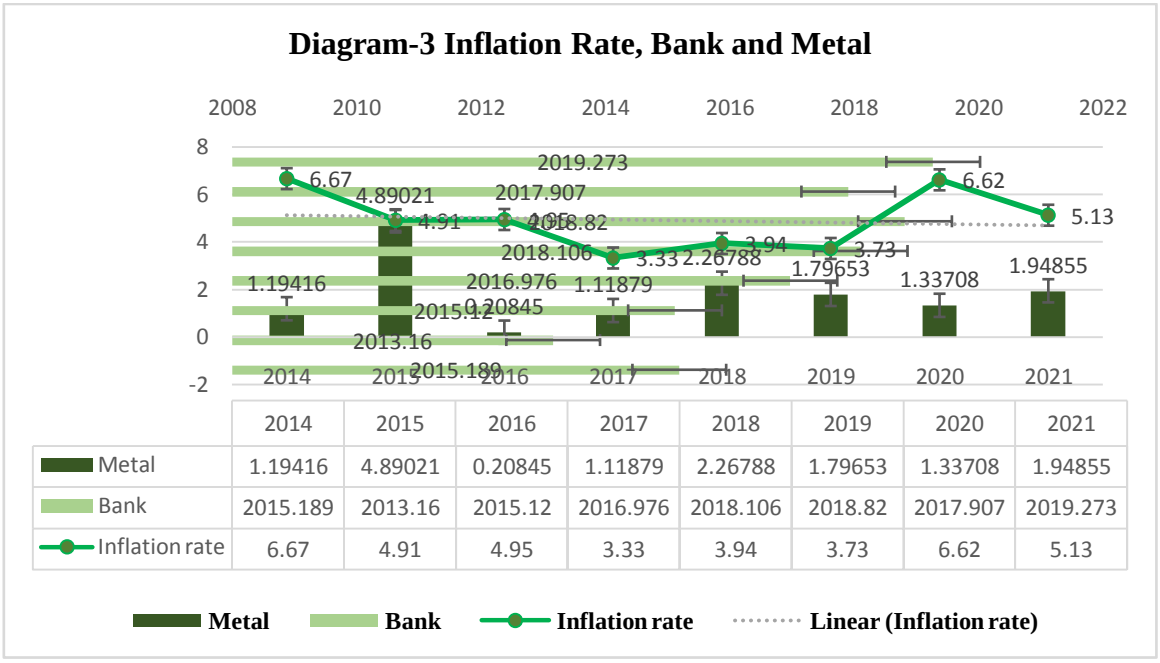
Diagram-2 Inflation Rate, Pharma and IT Services



	2014	2015	2016	2017	2018	2019	2020	2021
Inflation Rate	6.67	4.91	4.95	3.33	3.94	3.73	6.62	5.13
Pharma	1.2859	1.86657	0.81938	0.21649	0.07412	1.43143	1.1947	0.91205
IT	-1.2859	1.39845	0.66288	0.397611	0.32282	1.89517	1.078219	1.06907

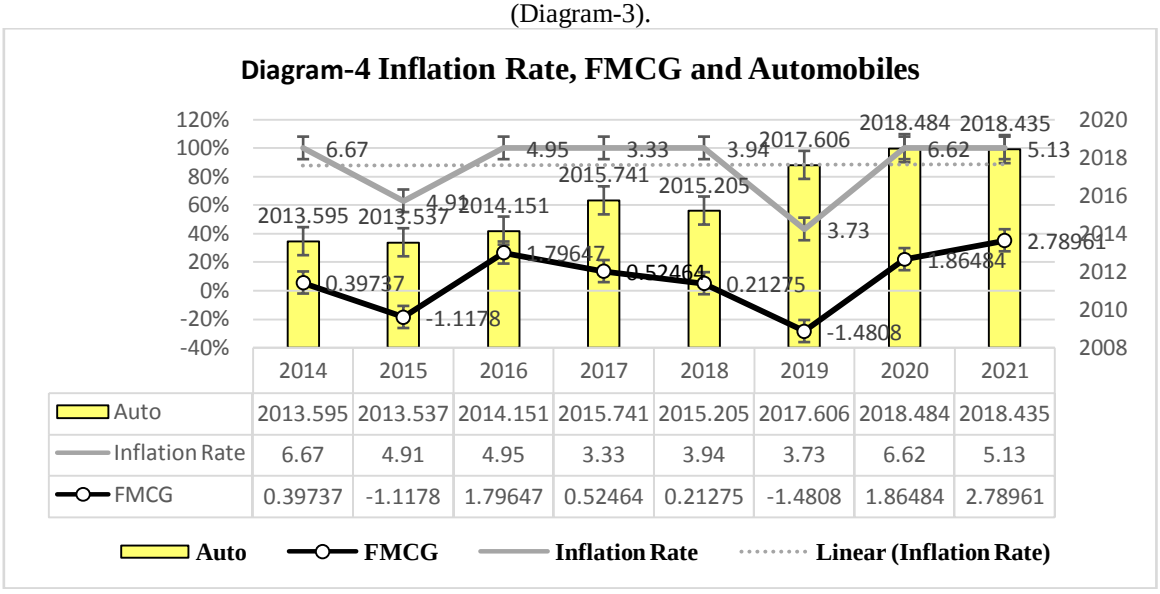
Diagram-2 plots data on the inflation rate and stock indexes of pharma and IT from 2014 to 2021 on a graph. The bar diagrams compare pharma and inflation rates, while the frequency curve depicts the IT stock market index for the specified years.

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	2014	2015	2016	2017	2018	2019	2020	2021
Metal	1.19416	4.89021	0.20845	1.11879	2.26788	1.79653	1.33708	1.94855
Bank	2015.189	2013.16	2015.12	2016.976	2018.106	2018.82	2017.907	2019.273
Inflation rate	6.67	4.91	4.95	3.33	3.94	3.73	6.62	5.13

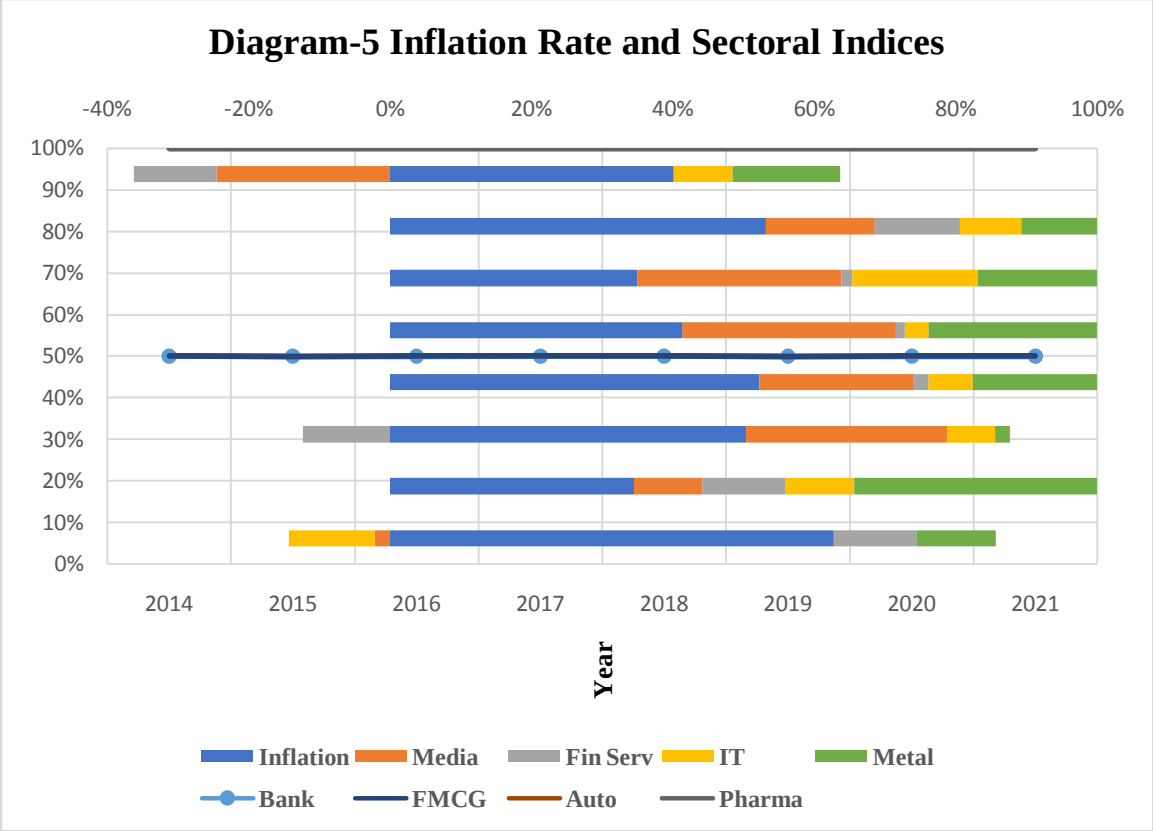
The graph shows data about the rate of inflation, metal stock market indexes, and banking services from 2014 to 2021. Metal and banking services are compared using bar graphs, and the frequency curve displays the inflation rate for the specified years (Diagram-3).



	2014	2015	2016	2017	2018	2019	2020	2021
Auto	2013.595	2013.537	2014.151	2015.741	2015.205	2017.606	2018.484	2018.435
Inflation Rate	6.67	4.91	4.95	3.33	3.94	3.73	6.62	5.13
FMCG	0.39737	-1.1178	1.79647	0.52464	0.21275	-1.4808	1.86484	2.78961

Inflation rate and Fast-Moving Consumer Goods (FMCG) and Automobile stock market index data from 2014 through 2021 are depicted in diagram 4. The vehicle stock market index is depicted by the bar chart, while the fast-moving consumer goods index and the rate of inflation are shown by the frequency curves.

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The stock market indexes of media companies and financial services are compared and contrasted here. The graphic above depicts information technology (IT), metal, banking, fast moving consumer goods (FMCG), vehicles, medicines, and the rate of inflation.

IV. CONCLUSION

There has been a significant amount of study done in the past with the intention of determining the relationship that exists between the rate of inflation and the indexes of the stock market. The current study attempted to determine the degree to which there is a correlation between changes in the rate of inflation and the movement of stock prices. This study makes use of information gathered from RBI sources and the NIFTY indices in order to conduct an analysis of the impact that inflation and its rate have on the performance of several sectoral indices in the Indian stock market. According to the findings, the changes in the indices of the stock market are not entirely produced due to inflation but rather are caused due to a variety of other reasons. However, the degree of relationship between the rate of inflation and stock market indices that was uncovered in the most recent study cannot be refuted. Henceforth, future investigations ought to include other factors such as the monetary policy and the fiscal policy, peer effects, financial news from the web, etc. to investigate what all affects the stock prices in the security market, which will be a great feature pool to add to the treasure trove.

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AUTHORS

- Dr. Jabir Moosa
- Mr Anil Kumar M
- Dr SURAJ E.S

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