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#### WINTER PROJECT REPORT

ON

# A STUDY ON IMPACT OF INFLATION ON INDIAN STOCK MARKET

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**BBA PROGRAMME** 

(YEAR 2023-24)

SHREE J.D GABANI COMMERCE COLLEGE &
SHREE SWAMI ATMANAND SARSWATI COLLEGE
OF MANAGEMENT

**VNSGU, SURAT** 

COLLEGE CERTIFICATE

This is to certify that this winter training report has been prepared by Tisha

Kamleshbhai Bhimani (21BBA010) under my guidance and supervision. This

project is the result of his/her own work and is of standard expected from a

candidate for the degree of Bachelor of Business Administration (B.B.A).

This report submitted toward the partial fulfilment of the requirement for the

degree of Bachelor of Business Administration (B.B.A.) during academic year

2023-24 has been found satisfactory.

Mr. Rasik Kathrotiya

Dr. Govind Dhinaiya

FACULTY GUIDE

I/C PRINCIPAL

Date:

Place: Surat

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**DECLARATION** 

I, hereby declare that, this winter training report submitted to Shree J. D. Gabani

Commerce College & Shree Swami Atmanand Saraswati college of Management,

in the fulfilment of requirement of Bachelor of Business Administration (BBA)

degree, is result of my own work carried out during January 2023 - February

2024.

This project report is entirely an outcome of my own efforts and has not been

previously submitted to any other university or institute for any other

examination and for any other purpose by any other person.

Tisha Kamleshbhai Bhimani

(21BBA010)

Date:

Place: Surat

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#### **ACKNOWLEDGEMENT**

I hereby grab an opportunity to acknowledge the support which Researcher has got at the time of preparation of winter training project.

First of all, I would like to thank to my college SHREE J.D GABANI COMMERCE COLLEGE & SHREE SWAMI ATMANAND SARSWATI COLLEGE OF MANAGEMENT which has given us the golden opportunity to prepare the Winter training report of "A STUDY ON IMPACT OF INFLATION ON INDIAN STOCK MARKET"

Researcher would also like to thank our internal guide Mr. Rasik Kathrotiya for helping through Winter project by giving us the necessary suggestions and advices along with their valuable co-ordination in completing this project.

Thank you,

Tisha Bhimani

#### **EXECUTIVE SUMMERY**

This report is a details overview of my winter training Project of **A STUDY ON IMPACT OF INFLATION ON INDIAN STOCK MARKET.** During my RESEARCH REPORT Researcher has learned a lot about the inflation, types of inflation, stock market, various indices of Nifty, and how the inflation affect the Indian stock market with the help of analytical tool Regression and Correlation.

This whole project is divided into 7 parts. 1. Introduction, 2. Theoretical framework, 3. Literature review, 4. Research methodology, 5. Data analysis, 6. Findings, 7. Conclusion of report.

In Introduction part where discuss about the basic knowledge about Inflation and Indian Stock market which help in to this project.

In 2<sup>nd</sup> chapter is Theoretical framework where deeply describe the Inflation, their types, causes, how affect the economy etc. also deeply describe Indian stock market, their types, NSE, BSE, various Nifty indices etc.

In 3<sup>rd</sup> chapter is Literature review which describe the past related Inflation affect the stock market research project done by various researchers. Also mentioned research topic, main objective, data collection, data analytical tool, Research design etc. which is helpful for this research project.

In 4th chapter is Research methodology where all the information is given about this project that Research topic name, Research main objective, Research design, Data analytical tool, Data collection method, sample size, variable under study, Research limitation etc.

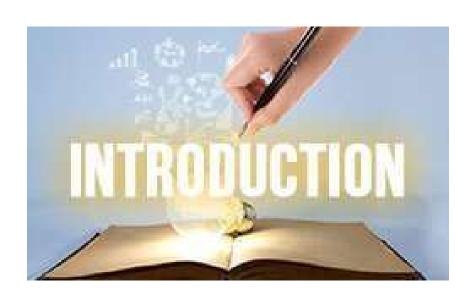
In 5<sup>th</sup> chapter is Data analysis where data collected from the various secondary sources and analysed correlation and regression of various Nifty indices with Inflation rate with their interpretation.

In 6<sup>th</sup> chapter is findings where all the analytical data is given which is create from data analysis and find the relation between Inflation and Indian Stock market. last chapter is Conclusion where Researcher summarised the final conclusion of this whole project that how inflation affect the Indian stock market of various Nifty indices.

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## **CHAPTER:1: INTRODUCTION**



Here the research topic is "IMPACT OF INFLATION ON THE STOCK MARKET". In this research topic I had been analysis that how inflation affect the various Nifty Indices while fluctuations of CPI Inflation rate.

The stock market consists of all the stocks that can be bought and sold by the general public on a variety of different exchanges. Making the right investment is a key aspect of investing, but continuing to hold a well- diversified portfolio can help increase your returns over time.

The indices are performance indicators that indicate the performance of a certain market segment or the market as a whole. A stock market index is constructed by choosing equities from similar companies or those that match a predetermined set of criteria.

The Consumer Price Index measures the overall change in consumer prices based on a representative basket of goods and services over time. The CPI is the most widely used measure of inflation, closely followed by policymakers, financial markets, businesses, and consumers.

Here in this project, I had been analysis of Impact of inflation on the stock market various Nifty indices like Nifty Automobile, Nifty bank, Nifty Financial services, Nifty IT, Nifty Midcap 150, Nifty Next 50 with CPI Inflation rate.

# CHAPTER:2: THEORETICAL FRAMEWORK



#### INTRODUCTION

#### **INFLATION**



Inflation is a broad increase in the prices of goods and services over time. It can also be described as a decline in purchasing power. It is defined as the rise in the general price level and fall in the money value. It occurs when the amount of buying power is more than the output of goods and services. It also occurs when the amount of money exceeds the amount of goods and services available.

One way of understanding inflation is, for instance, you bought a list of household essentials last month at an expense of INR 1,000, but this month the price of a certain food item in the same list has risen and that has led to an increase in the cost by let's say INR 1,100.

#### TYPES OF INFLATION

Following are the four main types of inflation:

#### 1. Creeping inflation

It is a situation where inflation in an economy increases gradually. It is one of the mildest types of inflation and is required to maintain a stable economy.

#### 2. Walking inflation

Also known as trotting inflation, it is a situation when the prices rise up to 10%. Walking inflation gives a cautionary signal for the occurrence of galloping inflation.

#### 3. Galloping inflation

It refers to the state of the economy when the prices of the goods and services increase at a rapid rate of 10% and more. In this state, the currency loses its value and citizens are unable to keep up with the rise in the prices of goods and services. It causes a serious economic imbalance in the country and calls for strict control measures.

#### 4. Hyperinflation

Hyperinflation is experienced by an economy when the prices skyrocket more than 50% in a month. The primary cause for such situations is the rise of money supply in an economy which is not supported by GDP growth. Hyperinflation is a rare phenomenon.

#### WHAT CAUSES OF INFLATION?

#### 1. DEMAND-PULL INFLATION

When demand for goods or services rises faster than the supply of those goods and services, the result is demand-pull inflation.

Demand-pull inflation is when there is an increase in aggregate demand, and the supply remains the same or decreases. When supply cannot meet growing demand, prices for goods and services are pulled higher.

The interplay of supply and demand helps set the prices of goods and services in an economy. Too little supply or too much demand can mean higher prices for everybody. Demand-pull inflation is when growing demand for goods or services meets insufficient supply, which drives prices higher.

#### 2. COST-PUSH INFLATION

When there is a disruption in the supply of goods and services, prices are pushed higher by cost-push inflation. With less supply but unchanged or higher demand, companies raise their prices, pushing up inflation.

Cost-push inflation occurs when demand remains static or grows even when prices climb higher. If demand for goods or services falls when the prices rise, then inflation remains subdued.

#### 3. MONETARY INFLATION

Monetary inflation occurs when there is an excessive supply of money.

It is understood that the government increase the money supply fasterthan the quantity of goods increase, which result in inflation.

Interestingly as the supply of good increase the money supply has to increase or else price actually go down.

#### 4. STRUCTURAL INFLATION

This occurs when there are structural rigidities and inefficiencies in the economy, leading to a rise in prices.

This can be caused by factors such as poor infrastructure, supply chain disruptions, market imperfections, institutional bottlenecks etc.

#### 5. IMPORTED INFLATION

This occurs when the prices of imported goods and services increase due to external factors, leading to a rise in domestic prices.

This can be caused by factors such as global commodity prices, international trade policies, exchange rate fluctuations etc.

#### **COST OF INFLATION**

Almost everyone thinks inflation is evil, but it isn't necessarily so. Inflation affects different people in different ways. It also depends on whether inflation is anticipated or unanticipated. If the inflation rate corresponds to what the majority of people are expecting (anticipated inflation), then we can compensate and the cost isn't high. For example, banks can vary their interest rates and workers can negotiate contracts that include automatic wage hikes as the price level goes up. Problems arise when there is unanticipated inflation.

Creditors lose and debtors gain if the lender does not anticipate inflation correctly. For those who borrow, this is similar to getting an interest-free loan.

Uncertainty about what will happen next makes corporations and consumers less likely to spend. This hurts economic output in the long run. People living off a fixed-income, such as retirees, see a decline in their purchasing power and, consequently, their standard of living.

The entire economy must absorb repricing costs ("menu costs") as price lists, labels, menus and more have to be updated.

If the inflation rate is greater than that of other countries, domestic products become less competitive.

People like to complain about prices going up, but they often ignore the fact that wages should be rising as well. The question shouldn't be whether inflation is rising, but whether it's rising at a quicker pace than your wages. Finally, inflation is a sign that an economy is growing. In some situations, little inflation (or even deflation) can be just as bad as high inflation. The lack of inflation may be an indication that the economy is weakening. As you can see, it's not so easy to label inflation as either good or bad - it depends on the overall economy as well as your personal situation.

#### **HOW INFLATIONN IS MEASURED?**

Measuring inflation is a difficult problem for government statisticians. To do this, a number of goods that are representative of the economy are put together into what is referred to as a "market basket." The cost of this basket is then compared over time. This results in a price index, which is the cost of the market basket today as a percentage of the cost of that identical basket in the starting year.

There are 3 types of price index:

**Consumer Price Index (CPI)** - A measure of price changes in consumer goods and services such as gasoline, food, clothing and automobiles. The CPI measures price change from the perspective of the purchaser. CPI data can be found at the Bureau of Labor Statistics.

Wholesale Price Index (WPI)- is the price of a representative basket of wholesale goods. Some countries (like the Philippines)

use WPI changes as a central measure of inflation. But now India has adopted new CPI to measure inflation. However, United States now report a producer price index instead.

**Producer Price Indexes (PPI)** - A family of indexes that measure the average change over time in selling prices by domestic producers of goods and services. PPIs measure price change from the perspective of the seller.

#### U.S. PPI data can be found at the Bureau of Labor Statistics

You can think of price indexes as large surveys. Each month, the U.S. Bureau of Labor Statistics contacts thousands of retail stores, service establishments, rental units and doctors' offices to obtain price information on thousands of items used to track and measure price changes in the CPI. They record the prices of about 80,000 items each month, which represent a scientifically selected sample of the prices paid by consumers for the goods and services purchased.

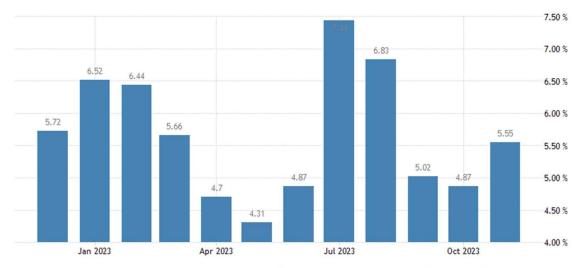
In the long run, the various PPIs and the CPI show a similar rate of inflation. This is not the case in the short run, as PPIs often increase before the CPI. In general, investors follow the CPI more than the PPIs.

#### INFLATION IN INDIA

Annual retail price inflation in India went up to 5.55% in November 2023, the first increase in four months, from 4.87% in October and compared

to market expectations of 5.7%. Food inflation went up to 8.7%, the highest in three months, from 6.61% in October. Monsoon in India hit five-year low in 2023 due to El Nino, affecting agricultural production. Prices rose the most for spices (21.6%),

pulses (20.2%), vegetables (17.7%), namely onions and tomatoes, fruit (11%) and cereals (10.3%) while cost for oils and fats went down 15%. Meanwhile, a slowdown was seen in prices for pan, tobacco, and intoxicants (3.81% vs. 3.87%), clothing and footwear (3.9% vs. 4.31%), housing (3.55% vs. 3.8%), and miscellaneous (4.38% vs. 4.4%). Additionally, fuel and light costs fell by 0.77% after a 0.39% drop in October.



TRADINGECONOMICS.COM | MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION (MOSPI)

#### **ISSUE**

The challenges in developing economy are many, especially when in context of the monetary policy with the Central Bank, the inflation and price stability phenomenon. There has been a universal argument these days when monetary policy is determined to be a key element in depicting and controlling inflation. The Central Bank works on the objective to control and have a stable price for commodities. A good environment of price stability happens to create saving mobilization and a sustained economic growth. The former Governor of RBI C. Rangarajan points out that there is a long-term trade-off between output and inflation. He addson that short-term trade-off happens to only introduce uncertainty about the price level in future. There is an agreement that the central banks have aimed to introduce the target of price stability while an

argument supports it for what that means in practice.

#### THE OPTIMAL INFLATION RATE

It arises as the basis theme in deciding an adequate monetary policy. There are two debatable proportions for an effective inflation, whether it should be in the range of 1-3 per-cent as the inflation rate that persists in the industrialized economy or should it be in the range of 6-7 per- cents. While deciding on the elaborate inflation rate certain problems occur regarding its measurement. The measurement bias has often calculated an inflation rate that is comparatively more than in nature. Secondly, there often arises a problem when the quality improvements in the product are in need to be captured out, hence it affects the price index. The consumer preference for a cheaper goods affects the consumption basket at costs, for the increased expenditure on the cheaper goods takes time for the increased weight and measuring inflation. The broker Commission has measured 1.1 per cent of the increased inflation in USA every-annum. The commission points out for the developed countries comprehensive study on inflation to be fairly low.

#### MONEY SUPPLY AND INFLATION

The Quantitative Easing by the central banks with the effect of an increased money supply in an economy often helps to increase or moderate inflationary targets. There is a puzzle formation between low- rate of inflation and a high growth of money supply. When the current rate of inflation is low, a high worth of money supply warrants the tightening of liquidity and an increased interest rate for a moderate aggregate demand and the avoidance of any potential problems. Further, in case of a low output a tightened monetary policy would affect the production in a much more severe manner. The supply shocks

haveknown to play a dominant role in the regard of monetary policy. The bumper harvest in 1998-99 with a buffer yield in wheat, sugarcane, and pulses had led to an early supply condition further driving their prices from what were they in the last year. The increased import competition since 1991 with the trade liberalization in place have widely contributed to the reduced manufacturing competition with a cheaper agricultural raw material and the fabric industry. These cost-saving driven technologies have often helped to drive a low-inflation rate. The normal growth cycles accompanied with 11the international price pressures has several times being characterized by domestic uncertainties.

#### **GLOBAL TRADE**



inflation in India generally occurs as a consequence of global traded commodities and the several efforts made by The Reserve Bank of India to weaken rupee against dollar. This was done after the Pokhran Blasts in 1998.14) This has been regarded as the root cause of inflation crisis rather than the domestic inflation. According to some experts the policy of RBI to absorb all dollars coming into the Indian Economy contributes to the appreciation of the rupee. When the US dollar has shrieked by a margin of 30%, RBI had made a massive injection of dollar in the economy make it highly liquid and this further triggered off inflation in non-traded goods. The RBI picture clearly portrays

for subsidizing exports with a weak dollar-exchange rate. All these account for a dangerous inflationary policy being followed by the central bank of the country. Further, on account of cheap products being imported in the country which are made on a high technological and capital-intensive techniques happen to either increase the price of domestic raw materials in the global market or they are forced to sell at a cheaper price, hence fetching heavy losses.

#### **FACTORS**

There are several factors which help to determine the inflationary impact in the country and further help in making a comparative analysis of the policies for the same. The major determinant of the inflation in regard to the employment generation and growth is depicted by the Phillips curve.

#### 1.DEMAND FACTORS

It basically occurs in a situation when the aggregate demand in the economy has exceeded the aggregate supply. It could further be described as a situation where too much money chases just few goods. A country has a capacity of producing just 550 units of a commodity but the actual demand in the country is 700 units. Hence, as a result of which due to scarcity in supply the prices of the commodity rise.

This has generally been seen in India in context with the agrarian society where due to droughts and floods or inadequate methods for the 12 storage of grains leads to lesser or deteriorated output hence increasing the prices for the commodities as the demand remains the same.

#### 2. SUPPLY FACTORS

The supply side inflation is a key ingredient for the rising inflation in India. The agricultural scarcity or the damage in transit creates a scarcity causing high inflationary pressures. Similarly, the high cost of labor eventually increases the production cost and leads to a high price for the commodity. The energies issues regarding the cost of production often increases the value of the final output produced. These supply driven factors have basically had a fiscal tool for regulation and moderation. Further, the global level impacts of price rise often impact inflation from the supply side of the economy. Consensus on the prime reason for the sticky and stubbornly high Consumer Price Index, that is retail inflation of India, is due to supply side constraints; and still where interest rate remains the only tool with The Reserve Bank of India." Higher inflation rate also constraints India's manufacturing environment.

#### **3.DOMESTIC FACTORS**

Developing economies like India have generally a lesser developed financial market which creates a weak bonding between the interest rates and the aggregate demand. This accounts for the real money gap that could be determined as the potential determinant for the price rise and inflation in India. There is a gap in India for both the output and the real money gap. The supply of money grows rapidly while the supply of goods takes due time which causes increased inflation. Similarly Hoarding has been a problem of major concern in India where onions prices have shot high in the sky. There are several other stances for the gold and silver commodities and their price hike.

#### What are the effects of Inflation on an economy?



Inflation has both Negative and Positive points which are as follows.

#### **Positive**

Labor-market adjustments - Inflation would lower the real wage if nominal wages are kept constant,

"Keynesians argue that some inflation is good for the economy, as it would allow labor markets to reach equilibrium faster". Debt relief-Debtors who have debts with a fixed nominal rate of interest will see a reduction in the "real" interest rate as the inflation rate rises.

#### Negative

Add inefficiencies in the market, and make it difficult for companies to budget or plan long- term can impose hidden tax increases, as inflated earnings push taxpayers into higher income tax rates.

Cost-push inflation - Rising inflation can prompt employees to demand higher wages, to keep up with consumer prices. Rising wages in turn can help fuel inflation.

Hoarding - People buy consumer durables as stores of wealth in the absence of viable alternatives as a means of getting rid of excess cash before it is devalued, creating shortages of the hoarded objects.

Hyperinflation - If inflation gets totally out of control (in the upward direction), it can grossly interfere with the normal workings of the economy, hurting its ability to supply.

Price inflation has immense effect on the Time Value of Money (TVM)- The above two examples explain the meaning of this statement.

## How are companies affected by rising inflation and how does an investor view the impact?

A rise in prices of several items means that the input prices for production of various goods and services are rising. In these cases, market analysts and fund managers will always consider the net impact on the margin of the entity that they are tracking. While there might be an increase in the input prices, it has to be considered in the backdrop of the company's ability to pass on the price hike to the end-user. If a company is able to sustain its profit margin despite high inflation, the stock price is likely to hold. If the high inflation sustains, at some stage it will lead to a chain reaction across the economy, pushing up interest rates and even affecting demand. An increase in interest rates will push up borrowing costs for corporates while lower demand will hurt growth in revenues. This is likely to impact sentiment for the stock market as a whole.

#### STOCK MARKET



A stock market is a marketplace where investors buy and sell shares of companies. It's a set of exchanges where companies issue shares and other securities for trading.

A share market is where shares are either issued or traded in. A stock market is similar to a share market. The key difference is that a stock market helps you trade financial instruments like bonds, mutual funds, derivatives as well as shares of companies. A share market only allows trading of shares.

The key factor is the stock exchange – the basic platform that provides the facilities used to trade company stocks and other securities. A stock may be bought or sold only if it is listed on an exchange. Thus, it is the meeting place of the stock buyers and sellers. India's premier stock exchanges are the Bombay Stock Exchange and the National Stock Exchange.

#### TYPES OF MARKET IN INDIA

There are 2 types of market in India:

- 1. Primary Market
- 2. secondary Market



#### 1. Primary market

Also known as the new issue market, companies sell new stocks and bonds to the public for the first time, such as with an initial public offering (IPO). In the primary market, investors purchase shares or bonds directly from a company in a one-time transaction

#### 2. Secondary market

Also known as the after-issue market, investors buy and sell the stocks and bonds among themselves, and can do so an infinite number of times. Secondary market examples include stock exchanges (BSE, NYSE, NSE) and over-the-counter (OTC).

#### **SEBI**

SEBI full form is Securities and Exchange Board of India SEBI is a statutory regulatory body established by the Government of India to regulate the securities market in India and protect the interests of investors in securities.

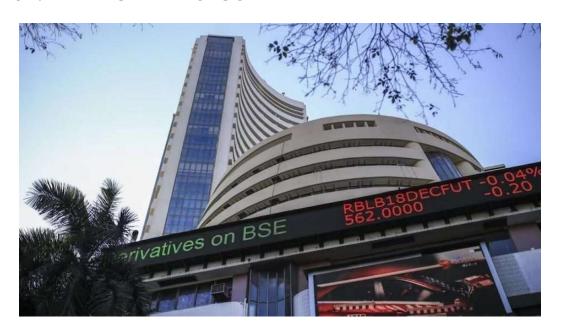
It also regulates the functioning of the stock market, mutual funds, etc.

#### VARIOUS STOCK EXCHANGE IN INDIA

There are 2 main stock exchange

- 1. BSE
- 2. NSE

#### 1.BSE: THE BOMBAY STOCK



BSE full form stands for Bombay Stock Exchange. It is the oldest stock exchange in India as well as Asia. Bombay Stock Exchange was established by Prem Chand Roy Chand in 1875 and is currently headed by Shri Sundararaman Ramamurthy (Managing Director & CEO).

#### **Bombay Stock Exchange**

The Bombay Stock Exchange is one of the largest securities markets. It is located on Dalal Street, Mumbai and lists over 6000 companies.

BSE has contributed significantly to developing and shaping India's capital markets. Through BSE, investors get the opportunity to trade in equities, mutual funds, debt

instruments, etc.

It also offers capital market trading services that include investor education, risk management, clearing, settlement, and many more.

#### **Background of BSE**

BSE has an interesting backstory to it. In the 19th century, some traders, with businessman Prem Chand Roy Chand, would gather under a Banyan tree in current Dalal Street. Popularly known as the Native Share

and Stockbrokers Association, this gathering would engage in purchasing and selling stocks. This association later evolved into the BSE.

Earlier, the BSE worked on a floor trading system in which a licensed broker stands in the ring and calls out the rising price. The investors, who were outside the BSE, would only find out about the stock prices in the newspapers. That is why the NSE, or the National Stock Exchange, went digital, and the prices became public to all investors. Consequently, the NSE became the favorite spot for investing.

Seeing the shift to digital, the board of BSE decided to change their system as well. In 1995, BSE received technological aid from CMC Ltd and went digital. Today, the BSE trading area is called BSE online trading.

There are three segments in BSE. They are:

- (I)Equity segment
- (ii) Debt segment
- (iii)Derivative segment

#### 1.Equity Segment

In this segment, there are nearly 5000 listed companies. It has market capitalization of Rs. 51,38,015 crores during 2007-08. The cash segment turnover during 2007-08 was Rs. 15,78,856 crores. Many of the companies listed on BSE are small in size. The shares of the listed companies of this exchange are grouped into three categories in terms of their quantitative characteristics. They are:

Group A shares, having large equity base, very high liquidity and consistency of good performance.

Group B, shares, having sound financial conditions, high liquidity and equity of more than Rs. 3 crores.

Group B, shares, having equity below Rs. 3 crore, low trading record and not sound financial conditions.

#### 2.Debt Segment

This segment purely deals with debt securities. It has also got two subsegments on the basis of the different issues of debt securities. These segments are:

#### F Segment and G Segment

the F segment deals with all corporate debt securities while the G segment deals with different government securities, treasury bills, PSU bonds etc.

#### 3. Derivative Segment

This segment is meant for derivative trading only. Recently, SEBI has permitted some of the derivative products like index futures, currency futures, interest rate futures etc., and hence derivatives trading is picking up in BSE. The derivative segment turnover was just Rs. 9 crores in 2005-06 and it has gone up to Rs. 2,42,308 crores in 2007-08. Stock indices of BSE. The major in indices of BSE are:

Sensex
BSE National Index
BSE 200 etc.

#### 2.NSE: NATIONAL STOCK EXCHANGE



The National Stock Exchange of India Limited is the country's leading financial exchange, with headquarters in Mumbai. It was incorporated in 1992 and, since then, has evolved into an advanced, automated, electronic system offering trading facilities to investors across the country.

In 2021, this exchange system ranked fourth in the world according to the metric of its trading volume.

#### **NSE**

NSE established in 1994, began its operations at the behest of the Indian government to bring transparency to the country's capital market. Set up by an assembly of leading financial institutions and at the recommendations formulated by Pherwani Committee, this stock exchange comprised diverse shareholding assets from both global and domestic investors.

It was also the first stock exchange in the country to introduce electronic trading facilities, thus facilitating the integration of investors throughout the country into a single base.

As of April 11, 2023, the total market capitalization of NSE is approximately USD 3.26 trillion, putting it in 9th place on the list of the largest stock exchanges in the world.

However, unlike the USA, where trading from the corporate sector accounts for about 70% of the country's GDP, this sector in India accounts for only 12-14% of its total GDP. Out of this entire corporate sector, around 7800 companies are listed, with about 4000 among those trading at Indian stock exchanges. Thus, stock exchange trading accounts for a meagre of 4% of the country's GDP.

#### Market Segments of National Stock Exchange

NSE trades securities in Whole Sale Debt and Capital Market Segments.

#### Whole Sale Debt Market Division

The first NSE section is the Whole Sale Debt Market section, which offers traders a trading system for diverse fixed-income instruments. Certificates of Deposit, Bonds, Commercial Paper, Treasury Bills, Central Government Securities, and other securities fall within this category.

#### The Capital Market Division

The Capital Market Segment of the NSE offers traders a means of trading for securities, including debentures, equity shares, exchange-traded funds, preference shares, and retail government securities.

#### The following are the objectives of NSE:

Establishing a nationwide trading facility for all types of securities. Ensuring equal access to investors all over the country through an appropriate communication network.

Providing a fair, efficient, and transparent securities market using an electronic trading system.

Enabling shorter settlement cycles and book entry settlements. Meeting international benchmarks and standards.

#### How Does NSE Stock Exchange Work?

Trading through this stock exchange in India is carried out through an electronic limit order book, where order matching takes place through a trading computer. This entire process does not have the interference of specialists or market makers and is driven entirely by orders.

When investors place a market order, it is automatically matched with a limit order. Thus, sellers and buyers can remain anonymous in this market.

Additionally, an order-driven market offers investors more transparency by displaying every buy and sell order in the trading system. These orders in NSE are placed via stockbrokers, who often provide customers with an online trading facility.

Few institutional investors can use this "direct market access" facility to place their orders directly into the trading system.

NSE market trading in the equities segment is carried on throughout theweek, except on Saturdays, Sundays and other holidays declared by the stock exchange. The timing is as

follows:

#### 1. Pre-opening session:

Order entry opens at 9.00 hours Order entry closes at 9.08 hours

#### 2. Regular session:

The market opens at 9.15 hours The market closes at 15.30 hours

National Stock Exchange's flagship index is the Nifty50 which represents about 63% of the total quantum of market capitalisation listed under it. This index covers approximately 12 sectors of the economy under 50 variable stocks.

Currently, the stock exchange is spearheaded by Vikram Limaye as the CEO and Managing Director and Ashok Chawla as the Chairman of the Board of Directors.

#### Major Indices in this Exchange System

A stock market index is created by choosing a collection of stocks representing the whole market or a specific segment.

Following is some of the most critical broad market indices, consisting of the liquid stocks that are listed on this stock exchange –

- 1. Nifty 50 index
- 2. Nifty 100 index
- 3. Nifty Next 50 index
- 4. Nifty Midcap 50 index
- 1. Nifty Small cap 250 index
- 2. India Vix index
- 3. NSE also includes other indices like thematic,

strategy, hybrid and fixed-income indices.

#### How does rising inflation affect the stock market?

The government usually hikes interest rates. This tends to make debt instruments attractive relative to equities as the former carry a lower risk (small savings instruments are risk free as they are guaranteed by the government). This results in some number of investments shifting from equity to debt. However, high inflation is not always bad and low inflation need not always be good for equity markets, as the impact will differ for companies and sectors across different time horizons. The first thing to consider is the items where prices are rising. For example, a rise in oil prices will impact a wide range of items from food products to those that require transportation.

#### **INDICES'**

Researcher has been analysis 6 stock indices:

- 1. Nifty Automobile
- 2.Nifty Bank
- 3. Nifty Financial services
- 4.Nifty IT
- 5. Nifty Midcap
- 6.Nifty Next 50

#### 1.Nifty Auto



Nifty Auto is a unique index specifically designed to track the performance of publicly listed automobile companies on the National Stock Exchange (NSE) of India.

It serves as a consolidated measure that provides insights into the overall trends and performance within the Indian automotive sector.

The National Stock Exchange of India (NSE) launched the NIFTY Auto Index on April 15, 2005. The index is made up of 15 leading automobile companies, representing the Indian automotive sector.

The index's base date is January 1, 2004, and it is calculated using the free float market capitalization method. The index's base value is 1000, and it is rebalanced every six months.

#### Sectors involved in Nifty Auto

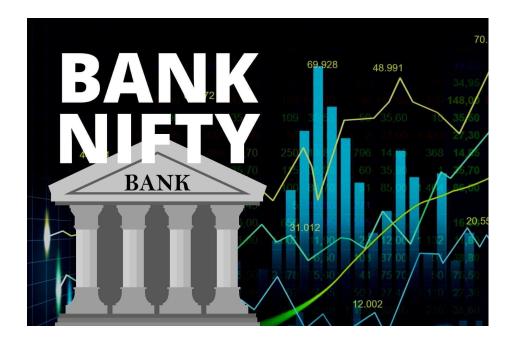
The Nifty auto index reflects the performance of the automobile sector which includes car manufacturers, motorcycles, heavy vehicles, auto ancillaries, etc. The index comprises of 15 stocks that are listed on the National Stock Exchange (NSE).

#### Nifty Auto stocks list

Here is the list of NIFTY Auto companies along with the assigned NIFTY Auto Index Weightage. This NIFTY Auto stock list is for educational purposes only.

Nifty Auto companies	Index Weightage
Maruti Suzuki Ltd	18.88%
Mahindra Ltd	15.97%
Tata Motors Ltd	11.97%
Hero MotoCorp Ltd	8.66%
Eicher Motors Ltd	7.20%

#### 2. Bank Nifty



The Bank NIFTY is an index comprising 12 banking company stocks. These stocks are traded on the National Stock Exchange (NSE).

The Bank NIFTY index contains stocks of companies from the banking sector only.

As the Bank NIFTY includes only banking sector stocks, it is considered the most liquid and highly capitalized.

The stocks which are listed in the Bank NIFTY belong to private and public sector banks.

The Bank NIFTY was formed in 2003, and since then, investors, both retail and institutional, have been employing it as a useful benchmark for banking stock investment.

#### Sectors involved in Nifty Bank

NIFTY Bank or Bank NIFTY is an index focused solely on the

banking sector. It comprises the most liquid Indian banking stocks and is the second most tracked index after the Nifty index. The index is calculated using the free float weighted method and has twelve stocks from the banking sector.

#### Nifty Bank Stock List

Bank Nifty	Index Weightage
HDFC Bank Ltd	28.86%
ICICI Bank Ltd.	24.42%
Kotak Mahindra Bank	10.27%
Ltd.	
Axis Bank Ltd.	9.79%
State Bank of India	9.39%

#### 3. Nifty Financial Services



In January 2021, the National Stock Exchange (NSE) launched

#### Nifty Financial Services Index.

The Nifty Financial Services Index (FINNIFTY) is made up of 20 companies. These companies include banks, financial institutions,

housing finance companies, insurance companies, and other financial services companies.

FINNIFTY tracks the performance of these companies, and the weight of each stock depends on the free float capitalization value in the market.

#### Sectors involved in Nifty Financial Services

Sector	Weightage
Banks	63.1%
Housing Finance Firms	18.5%
NBFCs	8.1%
Insurance Firms	8%
Other Services	1.3%
Financial Institutions	1.1%
Total Financial Sectors	100%

#### Nifty Financial Services Stock list

Nifty Financial Services	Index Weightage
HDFC Bank Ltd.	21.00%

ICICI Ltd.	13.88%
HDFC Bank	11.38%
State Bank of India	10.89%
Kotak Mahindra Bank Ltd.	8.46%

#### 4. Nifty IT



Foundation: 22 April 1996 (27 years ago)

The NIFTY IT index captures the performance of the Indian IT companies. The NIFTY IT Index comprises of 10 companies listed on the NSE.

The top stocks in Nifty IT include Infosys Ltd. 28.35%, Tata Consultancy Services Ltd. 24.18% weight, HCL Technologies Ltd. 10.43%, Tech Mahindra Ltd. 9.68% Wipro Ltd. 7.83% and Tech Mahindra Ltd. 8.22%. The Nifty IT index variant is NIFTY IT Total Returns Index.

The Nifty IT index captures the performance of the Indian IT companies. The Nifty IT Index comprises of 10 companies listed on the National Stock Exchange (NSE).

The Nifty IT index is computed using free float market capitalization method with a base date of Jan 1, 1996 indexed to a base value of 1000 wherein the level of the index reflects total free float market value of all the stocks in the index relative to a particular base market capitalization value. The base value of the index was revised from 1000 to 100 with effect from May

28, 2004.

## Sectors involved in Nifty IT

In Nifty IT sector companies should from a part of the It sector.

## Nifty IT Stock list

Nifty IT	Index Weightage
Infosys Ltd	28.35%
Tata Consultancy Services Ltd	24.18%
HCL Technologies Ltd	10.43%
Tech Mahindra Ltd	9.68%
Wipro Ltd	7.83%
LTIMindtree Ltd	5.81%
Persistent Systems Ltd	5.00%
Coforge Ltd	4.43%
MphasiS Ltd	2.51%
L&T Technology Services Ltd.	1.78%

#### 5. Nifty Midcap 150



The NIFTY MIDCAP 150 (NIMI150) index was launched in April 2016 with a base value of 1000 and a base date of April 1, 2005. It represents around 15% of the free float market capitalization of NSE stocks. The index is rebalanced semi-annually, and the average data for the six months before the cut-off date determines which stocks are removed from the index.

The Nifty Midcap150 Quality 50 Index includes top 50 companies from its parent Nifty Midcap 150 index, selected based on their 'quality' scores. The quality score for each company is determined based on return on equity, financial leverage (except for financial services companies) and earning per share (EPS) growth variability of each stock analyzed during the previous 5 financial years. The weight of each stock in the index is based on a combination of stock's quality score and its free float market capitalization.

50 companies with higher profitability, lower leverage and more stable earnings are selected to be part of the index.

50 companies with higher profitability, lower leverage and more stable earnings are selected to be part of the index.

#### Nifty Next 50 Stock list

Nifty MIDCAP 150	Sector	Weightage
Max Healthcare	Healthcare Services	2.27%
Institute Ltd.	Provider	
Adani power Ltd.	Diversified Adani sector	2.27%
Power finance	Indian Power sector	2.16%
Corporation Ltd.		
REC Ltd. (Rural	Ministry of power	2.08%
Electrification		
Corporation)		
Fertilizers Chemical	Agrochemical (Public	1.85%
Travancore Ltd.	sector)	

#### Sectors involved in Nifty Midcap 150

Sector Weight (%)

Financial Services 23.24

Capital Goods 12.83

Healthcare 10.99

Automobile and Auto

Components 7.22

Information Technology 6.80

Chemicals 5.30

Power 4.33 etc.

#### 6. Nifty next 50



The Nifty Next 50 index was launched on December 24, 1996, with a baseyear of 1996, a base value of 1000, and a base capital of 0.43 trillion rupees. The index is reconstituted on a semi-annual basis

The Nifty Next 50 index is made up of around 10% of the free float market capitalization of the stocks listed on the National Stock Exchange (NSE). The securities and weights of the companies in the Nifty Next 50 are chosen based on their free-float market capitalization.

Investors use the Nifty Next 50 to gain insights into the performance of mid-cap stocks in India. These insights can help investors spot future large cap companies

The Nifty Next 50 index represents 50 companies from the Nifty 100, excluding the Nifty 50 companies. The companies in the Nifty Next 50 must have an average free-float market capitalization that is at least 1.5 times the average free-float market capitalization rate of the smallest stock in the index.

#### Sectors involved in Nifty Next 50

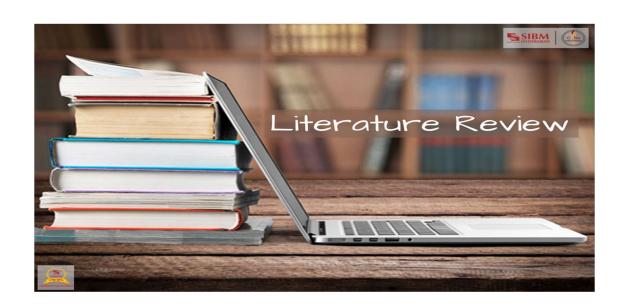
The index encompasses various sectors such as Financial Services, IT, FMCG, power, oil and gas, metal, construction,

automobiles, chemicals, and so on. The Nifty 50 is a crucial stock market index comprising the 50 largest publicly traded companies listed on the NSE in India.

#### Nifty Next 50 Stock list

Nifty Next 50	Index Weightage
Zomato Ltd.	4.53%
Trent Ltd.	3.97%
Varun Beverages Ltd.	3.69%
Bharat Electronics Ltd.	3.64%
Shriram Finance Ltd.	3.53%

# CHAPTER:3: LITRETURE REVIEW



1. Saurabh Singh, Dr. L.K. Tripathy, Kirti Lalwani

(2013)

Topic name: "AN IMPIRICAL STUDY OF IMPACT OF

EXCHANGE RATE & INFLATION RATE ON PERFORMANCE OF

BSE SENSEX".

**Objective:** In their research paper they try to examine the primary

factors responsible for affecting Bombay Stock Exchange in

India. They attempt to investigate the relative influence of the

factor affecting BSE and thereby categorized them.

Research design: Descriptive research design

Data collection method: data collected from BSE website

**Tools used for data analysis:** Correlation and Regression

Sampling technique: convenience sampling technique

**Sample size:** 10 Listed companies at BSE

**Time period:** 2010 to 2013

Finding & Conclusion: Researcher find the negative relation

between rate of stock exchange and inflation rate

2. S Sathyanarayana, Sudhindra Gargesa IRA-

International Journal of Management & Social

Sciences (2018)

**Topic name:** "analytical study of the effect of inflation on stock

market returns"

37

**Objective:** To find out the relation between inflation and stock market.

Research design: Descriptive

**Data collection method:** Data collected from BSE and NSE website, Newspaper, journals

Tools used for data analysis: simple regression analyses

Sampling technique: Convenience

**Sample size:** a sample of twenty companies listed at the Nairobi Securities Exchange

**Time period:** 2016 to 2018

Finding & Conclusion: simple regression analyses were employed to estimate a single equation with stock market liquidity as the dependent variable and explanatory variables as inflation, interest rates, and GDP growth. The study reported a negative relationship between stock market liquidity and inflation, contrary to Fisher's hypothesis. The findings of this study shed light on the price discovery process at the Nairobi Securities Exchange, indicating that investors fail to factor in the effect of inflation on stocks at the securities exchange. The study recommended increased investor education to remedy this anomaly.

3.(Campbell et al., 2017; Boons et al., 2020; Campbell et al., 2020; Cieslak and Pflueger, 2023; Pflueger, 2023; Seo, 2023)

Topic name: "Relation between Inflation and stock market"

**Objective:** The main aim was to find out relation between inflation and stock market.

Research design: causal research design

**Data collection method:** Data collected from BSE and NSE website, Newspaper, journals

Tools used for data analysis: simple regression analyses

Sampling technique: convenience sampling

Time period: 2015 to 2023

**Finding & Conclusion:** This result is consistent with models in which firms' prices drift away from optimal prices with higher inflation, leading to potential output losses.

### 4.M Piazzesi (2007)

**Topic name:** "Inflation, monetary policy and stock market conditions"

**Objective**: his paper examines the association between inflation, monetary policy and U.S. stock market conditions during the secondhalf of the 20th century.

Research design: longitudinal cross section research design.

Data collection method: Data collected from BSE and

NSE website, Newspaper, journals

Tools used for data analysis: Correlation and regression

Sampling technique: convenience sampling

**Time period:**2001 to 2006

Finding & Conclusion: stock market conditions during the second half of the 20th century. We estimate a latent variable VAR to examine how macroeconomic and policy shocks affect the condition of the stock market. Further, we examine the contribution of various shocks to market conditions during particular episodes and find evidence that inflation and interest rate shocks had particularly strong impacts on market conditions in the postwar era. Disinflation shocks promoted market booms and inflation shocks contributed to busts. Researcher conclude that central banks can contribute to financial market stability by minimizing unanticipated changes in inflation.

## 5. Journal of monetary economics has done their research in (2010)

**Topic name:** "Inflation and the stock market: understanding the fed model"

**Objective:** for understanding relationship between stock market and inflation.

Research design: Descriptive

Data collection method: Data collected from BSE and NSE

website, Newspaper, journals

Tools used for data analysis: FED Model for understanding

relationship between stock market and inflation.

Sampling technique: Simple Random Sampling

**Time period:**2006 to 2010

Finding & Conclusion: Researcher find that there is

negative correlation between Inflation and Stock market.

6. Campbell and Vuolteenaho (2004)

Topic name: Inflation and Stock Prices: No Illusion.

**Objective:** Researcher find that the regression coefficient of

the mispricing component on inflation is positively and

statistically significant, and their results provide strong

support to the inflation illusion hypothesis Campbell and

Vuolteenaho (2004) use VAR results to advocate inflation

illusion as the explanation for the positive association

between inflation and dividend yields.

Research design: Exploratory

Data collection method: Data collected from BSE and NSE

website, Newspaper, journals

Tools used for data analysis: Used a structural approach,

we find that a fully rational dynamic general equilibrium model

can generate a positive correlation between dividend yields

and inflation as observed in the data

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Sampling technique: Convenience

**Time period:**2000 to 2004

**Finding & Conclusion:** The paper describes a channel by which the technology shock moves both inflation and dividend yields in the same direction.

7. K

enya t Olweny (2011) K Omondi - Economics and Finance

**Topic name:** "The effect of macro-economic factors on stock return volatility in the Nairobi stock exchange"

**Objective:** The general objective of the study was to establish the effect of Macro-economic factors on the stock return volatility in the Nairobi Stock Exchange. The study used monthly time series data for NSE all share index that covered a period of 10 years from January 2001 to December 2010. This was aimed at achieving comprehensive coverage and a decade gave much accurate results

Research design: longitudinal cross sectional

**Data collection method:** Time series secondary data was used in the study. The data was bought from Nairobi Stock Exchange that was used in the analysis and inferences drawn. Other sources of data were from Central Bank of Kenya and Kenya National Bureau of Statistics. The data was obtained in soft copy and accuracy was observed.

Tools used for data analysis: Correlation and regression

Sampling technique: Convenience

**Time period:** January 2001 and December 2010

**Finding & Conclusion:** The main findings of the research study are as follows: the stock returns are symmetric but leptokurtic and not normally distributed. The results showed evidence that foreign exchangerate, Interest rate and Inflation rate, affect stock return volatility.

#### 8. N. Bulent Gultekin

**Topic name:** "Stock Market Returns and Inflation: Evidence from Other Countries"

**Objective:** This paper investigates the relation between common stock returns and inflation in twenty-six countries for the postwar period

Research design: Causal research

**Data collection method:** Data collected from BSE and NSE website, Newspaper, journals

Tools used for data analysis: Correlation and regression

**Sampling technique:** Stratified quota sampling method

**Time period:** twenty-six countries for the postwar period

**Finding & Conclusion:** which states that real rates of return on common stocks and expected inflation rates are independent and that nominal stock returns vary in one-to-one correspondence with expected inflation. There is a consistent lack of positive relation between stock returns and inflation in most

of the countries.

9.IRA-International Journal of Management

Social Sciences December (2018)

Topic name: "relationship between inflation and stock market

evidence from selected global stock markets"

**Objective:** undertaken with an intention to investigate the

relationship between inflation and stock returns of the

chosen economies.

Research design: Exploratory

**Data collection method**: collected the monthly data 2000 to

2017 for selected indices.

Tools used for data analysis: Pearson coefficient

Sampling technique: Convenience

**Time period:** 2000 to December 2017

Finding & Conclusion: Majority of the chosen indices recorded a

negative coefficient with the dependent variable. For India, Austria,

Belgium, Canada, Chile, China, France, Ireland we found a negative

coefficient. However, Brazil Indonesia, Japanese, Mexico, Spanish

and Turkey reported a positive coefficient.

10. J Khan (2009)

Topic name: Impact of Micro and Macroeconomic Variables on

Emerging Stock Market Return

Objective: This research main aim was found out that how

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micro and macro variables were affect to the stock market.

**Data collection method:** Data collected from BSE and NSE website, Newspaper, journals

Tools used for data analysis: Multivariate Regression Model

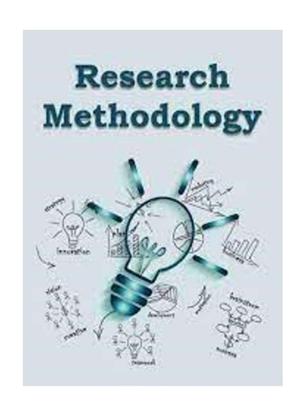
Research design: Exploratory research

Sampling technique: Simple random

**Time period:** July 2002 to December 2009 (90 monthly observations)

**Finding & Conclusion:** Our multivariate regression test result showed that inflation and foreign remittances are negatively related with stock prices indicating the fact that additional funds flow through inflation and foreign remittances increase the supply side through additional funds flow in the stock market while demand side remains unaffected.

## CHAPTER:4: RESEARCH METHODOLOGY



#### 1. Need for research

The need for research on the topic of how inflation affects the stock market is crucial for investors and policymakers. Understanding the intricate relationship between inflation and stock market performance is essential for making informed investment decisions and formulating effective economic policies. In this area, Researcher has provided valuable insights into the specific impact of inflation on different types of stock market, what will the effect of inflation on the economy. By deeper into this relationship, researcher has contributed to the body of knowledge that guide sound investment practices during periods of high inflation.

#### 2. Problem statement

"THE IMPACT OF INFLATION ON THE STOCK MARKET"

## 3. Research objectives

#### A. Primary objective

The main objective of the study to analyse the impact of inflation on the stock market.

### **B. Secondary objective**

To find out the correlation and regression between CPI Inflation rate and various Nifty indices

## 4. Variable under study

#### A. Independent variable

Inflation rate

#### B. Dependent variable

Various Nifty indices

- 1. Nifty Automobile
- 2.Nifty Bank
- 3. Nifty Financial services
- 4. Nifty IT
- 5. Nifty Midcap 150
- 6. Nifty Next 50

#### 5. Research Design

#### A. Type of Research

A research design is the framework or guide used for the planning, implementation and analysis of a study. It is the plan for answering theresearch questions or hypotheses.

In this research, Researcher has used causal research design. Because this research topic is the impact of inflation on the stock market identifies the extent & nature of cause (Inflation)& effect relationships (Nifty Automobile, Nifty Bank, Nifty Financial services, Nifty IT, Nifty Midcap 150, Nifty Next 50)

#### B. Data collection method

In this research topic "The impact of inflation on the stock" the data has used " secondary data ". This secondary data of stock market indices has been taken from various websites.

#### C.Sample Design

#### (I) Sample unit

It includes 6 Nifty indices:

- 1. 1.Nifty Automobile
- 2. 2.Nifty Bank
- 3. Nifty Financial services
- 4. 4. Nifty IT
- 5. Nifty Midcap 150
- 6. Nifty Next 50

#### (ii) sample size

It includes above 5 Nifty Indices as above.

#### (iii) sample period

In this research project sample period has The Nifty indices and various Nifty indices (12th January, 2023 to 12th December, 2023)

#### (iv) Sample technique

In this research project, Researcher has used non probability convenience sampling techniques.

## 6. Tools for Data analysis

In this Research project Researcher has used Correlation and Regression analytical tool.

Correlation is a statistical measure that expresses the extent to which two variables are linearly related (meaning they change together at a constant rate). It's a common tool for describing simple relationships without making a statement about cause and effect.

Correlation refers to the statistical relationship between the two

entities. It measures the extent to which two variables are linearly related. For example, the height and weight of a person are related, and taller people tend to be heavier than shorter people. You can apply correlation to a variety of data sets.

Regression is a statistical method used in finance, investing, and other disciplines that attempts to determine the strength and character of the relationship between one dependent variable (usually denoted by Y) and a series of other variables (known as independent variables).

Typically, a regression analysis is done for one of two purposes: In order to predict the value of the dependent variable for individuals for whom some information concerning the explanatory variables is available, or in order to estimate the effect of some explanatory variable on the dependent variable.

#### 7. Limitations

In this research project researcher has analyzed correlation and regression very short period time (12th January, 2023 to 12th December, 2023).

In this Research project Researcher has only consider Nifty indices and ignored BSE indices.

This project has limited to "Relationship of inflation and Indian stock market "there are other macroeconomic factors that affect the stock market.

## **CHAPTER:5: DATA ANALYSIS**



CPI Inflation rate is released on every 12<sup>th</sup> date of every month by the National Statistical Office (NSO) of the Ministry of Statistics and Programme Implementation (MoSPI) releases the Consumer Price Index (CPI) data in India.

In India, the stock market operates from 9:15 AM to 3:30 PM, with a pre- opening session from 9 AM to 9:15 AM and a post-closing session from 3:30 PM to 4 PM.

These timings are also the same whether you want to trade on any of the two major stock exchanges in India, namely the BSE and the NSE. The regular market trading hours are from 09:15 AM and close at 03:30 PM. There's a pre-opening session before 09:15 AM and a post-closing session after 03:30 PM.

For Data analysis purpose researcher has taken closing price of every Nifty Indices'.

For Data analysis purpose Researcher has taken CPI Inflation rate for analyzing Impact of Inflation on the stock market.

Here in Data analysis chapter all the secondary data is mentioned and analyzing the impact of Inflation on the stock market with the help of Correlation and Regression Data analytical tool.

## 1. Nifty Automobile

CPI Inflation rate	Nifty Automobile price
(%)	
5.72	12797.5
6.52	13224.6
6.44	12714.55
5.66	12884.45
4.70	13952.75
4.25	14714.25
4.81	15685.1
7.44	15369.75
6.83	16081.25
5.02	16231.25
4.87	16370.15
5.55	17753.8

#### **CORRELATION**

X= CPI Inflation rate

(%) Y= Nifty

Automobile N=12

	CPI Inflation	Nifty
	rate (%)	Automobile
		price
CPI Inflation rate	1	-0.142336509
(%)		
Nifty Automobile	-0.142336509	1
price		

#### REGRESSION

#### SUMMARY OUTPUT

Regression Statistics		
Multiple R	0.142336509	
R Square	0.020259682	
Adjusted R square	-0.07771435	
Standard Error	1748.953606	
Observations	12	

#### Interpretation

#### Correlation

The correlation coefficient between CPI Inflation rate (%) and Nifty Automobile price is -0.142336509. This value is close to zero and negative, suggesting a weak and almost negligible linear relationship between the two variables.

#### Regression

Multiple R (correlation coefficient): 0.142336509 indicates the strength and direction of the linear relationship. It's still relatively low, reinforcing a weak relationship.

R Square: 0.020259682 represents the proportion of the variance in the Nifty Automobile price that can be explained by the CPI Inflation rate. In this case, only about 2.03% of the variability is explained by the inflation rate.

Adjusted R Square: -0.07771435 adjusts the R-squared value based on the number of predictors. The negative value might suggest that the model is not a good fit, and including the CPI Inflation rate as a predictor doesn't significantly improve the

model.

Standard Error: 1748.953606 is a measure of the variability of the actual values from the predicted values. Lower values are generally preferred, but interpretation depends on the context.

Observations: 12 indicates the number of data points used in the regression analysis.

## 2. Nifty Bank

CPI Inflation	Nifty Bank price
rate (%)	
5.72	42082.25
6.52	13235.05
6.44	40485.45
5.66	41557.95
4.70	43793.55
4.25	43944.2
4.81	44639.45
7.44	44199.1
6.83	45511.35
5.02	44599.2
4.87	43996.65
5.55	47097.55

#### **CORRELATION**

X= CPI Inflation rate

(%)Y= Nifty Bank

N=12

	CPI Inflation	Nifty Bank price
	rate (%)	
CPI Inflation rate	1	-0.399530861
(%)		
Nifty Bank price	-0.399530861	1

#### **REGRESSION**

SUMMARY OUTPUT

Regression Statistics		
Multiple R	0.399530861	
R Square	0.159624909	
Adjusted R square	0.075587399	
Standard Error	8654.344459	
Observations	12	

#### Interpretation

#### Correlation

The correlation coefficient between CPI Inflation rate (%) and Nifty Bank price is -0.399530861. This negative value suggests a moderate negative linear relationship between the two variables. As the inflation rate increases, there is a tendency for the Nifty Bank price to decrease.

#### Regression

Multiple R (correlation coefficient): 0.399530861 indicates a moderate strength and negative direction of the linear relationship. It suggests that there is a correlation between the CPI Inflation rate and Nifty Bank price.

R Square: 0.159624909 represents the proportion of the variance in the Nifty Bank price that can be explained by the CPI Inflation rate. In this case, approximately 15.96% of the variability in the Nifty Bank price is explained by changes in the inflation rate.

Adjusted R Square: 0.075587399 adjusts the R-squared value based on the number of predictors. While positive, it's still relatively low, suggesting that the model might not be capturing all relevant information. The adjusted R square takes into account the number of variables in the model and penalizes for the inclusion of irrelevant variables.

Standard Error: 8654.344459 is a measure of the variability of the actual values from the predicted values. In this case, it is relatively high, indicating that the model may not be very accurate in predicting Nifty Bank prices based on the CPI Inflation rate.

Observations: 12 indicates the number of data points used in the regression analysis.

## 3. Nifty Financial Services

CPI Inflation	Nifty Financial Services price
rate (%)	
5.72	18540.05
6.52	18516.2
6.44	17987.75
5.66	18702.05
4.70	19507.12
4.25	19399.75
4.81	19924.1
7.44	19718.65
6.83	20303.85
5.02	19945.7
4.87	19657.25
5.55	21173.25

#### **CORRELATION**

X= CPI Inflation rate

(%) Y= Nifty Financial

Services N=12

	CPI Inflation	Nifty Financial
	rate (%)	Services price
CPI Inflation rate	1	-0.10133566
(%)		
Nifty Next 50	-0.10133566	1
price		

#### REGRESSION

#### SUMMARY OUTPUT

Regression Statistics		
Multiple R	0.101335661	
R Square	0.010268916	
Adjusted R square	-0.08870419	
Standard Error	936.7236727	
Observations	12	

#### Interpretation

#### Correlation

The correlation coefficient between CPI Inflation rate (%) and Nifty Financial Services price is -0.10133566. This value is close to zero and negative, suggesting a weak and almost negligible linear relationship between the two variables.

#### Regression

Multiple R (correlation coefficient): 0.101335661 indicates the strength and direction of the linear relationship. Again, it's very close to zero, reinforcing a weak relationship.

R Square: 0.010268916 represents the proportion of the variance in the Nifty Financial Services price that can be explained by the CPI Inflation rate. In this case, only about 1.03% of the variability is explained by the inflation rate.

Adjusted R Square: -0.08870419 adjusts the R-squared value based on the number of predictors. The negative value might suggest that the model is not a good fit, and including the CPI Inflation rate as a predictor doesn't significantly improve the model.

Standard Error: 936.7236727 is a measure of the variability of the actual values from the predicted values. Lower values are generally preferred, but interpretation depends on the context.

Observations: 12 indicates the number of data points used in the regression analysis.

## 4. Nifty IT

CPI Inflation	Nifty IT price
rate (%)	
5.72	28720.3
6.52	30870.2
6.44	29545.5
5.66	28980.3
4.70	28028.4
4.25	28784
4.81	29118.05
7.44	30819.15
6.83	32977.9
5.02	32003.6
4.87	30861
5.55	33493.9

#### **CORRELATION**

X= CPI Inflation rate

(%) Y= Nifty IT

N=12

	CPI Inflation	Nifty IT price
	rate (%)	
CPI Inflation rate	1	0.430789959
(%)		
Nifty Next 50	0.430789959	1
price		

#### REGRESSION

### SUMMARY OUTPUT

Regression Statistics		
Multiple R	0.430789959	
R Square	0.185579989	
Adjusted R square	0.104137987	
Standard Error	1683.996101	
Observations	12	

### Interpretation

#### Correlation

The correlation coefficient between CPI Inflation rate (%) and Nifty IT price is 0.430789959. This positive value suggests a moderate positive linearrelationship between the two variables.

### Regression

Multiple R (correlation coefficient): 0.430789959 indicates a moderate strength and positive direction of the linear relationship. It suggests that as the CPI Inflation rate increases, there is a tendency for the Nifty IT price to increase as well.

R Square: 0.185579989 represents the proportion of the variance in the Nifty IT price that can be explained by the CPI Inflation rate. In this case, approximately 18.56% of the variability in the Nifty IT price is explained by changes in the inflation rate.

Adjusted R Square: 0.104137987 adjusts the R-squared value based on the number of predictors. While it is positive, indicating some improvement, it's still relatively low, suggesting that the model might not be capturing all relevant information.

Standard Error: 1683.996101 is a measure of the variability of the actual values from the predicted values. Lower values are generally preferred, but interpretation depends on the context.

Observations: 12 indicates the number of data points used in the regression analysis.

## 5. Nifty Midcap 150

CPI Inflation rate	Nifty Midcap 150 price
(%)	
5.72	11836.4
6.52	11738.3
6.44	11582.15
5.66	11652.3
4.70	12196.1
4.25	12890.6
4.81	13600
7.44	14190.3
6.83	15045.01
5.02	15158.1
4.87	15298.95
5.55	16490.5

### **CORRELATION**

X= CPI Inflation rate

(%)Y= Nifty Midcap

N=12

	CPI Inflation	Nifty Midcap
	rate (%)	150 price
CPI Inflation rate	1	-0.03502236
(%)		
Nifty Next 50	-0.03502236	1
price		

#### REGRESSION

### SUMMARY OUTPUT

Regression Statistics		
Multiple R	0.035022356	
R Square	0.001226565	
Adjusted R square	-0.09865078	
Standard Error	1810.92026	
Observations	12	

### Interpretation

### Correlation

The correlation coefficient between CPI Inflation rate (%) and Nifty Midcap 150 price is -0.03502236.

This coefficient suggests a very weak negative correlation between the two variables. The negative sign indicates that as one variable increases, the other tends to decrease, but the relationship is not strong.

### Regression

Multiple R (Correlation Coefficient): It is 0.035022356, indicating the strength and direction of the linear relationship between the independent variable (CPI Inflation rate %) and the dependent variable (Nifty Midcap 150 price).

R Square (Coefficient of Determination): It is 0.001226565, representing the proportion of the variance in the dependent variable that is predictable from the independent variable. In this case, it's a very low value, suggesting that only a small fraction of the variation in Nifty Midcap 150 price can be explained by changes in CPI Inflation rate (%).

Adjusted R Square: It is -0.09865078. A negative adjusted R square is unusual and may indicate issues with the model's fit or complexity.

Standard Error: It is 1810.92026, representing the average distance between the observed values and the values predicted by the model. Lower values are generally better.

Observations: There are 12 data points in the analysis.

## 6. Nifty Next to 50

CPI Inflation	Nifty Next 50 price
rate (%)	
5.72	42052.70
6.52	38674.75
6.44	38101.05
5.66	38592.00
4.70	40825.25
4.25	43039.30
4.81	44392.05
7.44	44460.55
6.83	45496.45
5.02	45158.20
4.87	45898.20
5.55	50984.65

### **CORRELATION**

X= CPI Inflation rate (%)Y= Nifty Next 50 price N=12

	CPI Inflation	Nifty Next 50
	rate (%)	price
CPI Inflation rate	1	-0.298947
(%)		
Nifty Next 50	-0.298947	1
price		

### REGRESSION

#### SUMMARY OUTPUT

Regression Statistics		
Multiple R	0.298947	
R Square	0.089369	
Adjusted R Square	-0.001694	
Standard Error	3733.515	
Observations	12	

### Interpretation

### Correlation

The correlation coefficient between CPI Inflation rate (%) and Nifty Next 50 price is -0.298947.

This coefficient indicates a weak negative correlation between these two variables. As one variable increases, the other tends to decrease, but the relationship is not very strong.

### Regression

Multiple R (Correlation Coefficient): It is 0.298947, indicating the strength and direction of the linear relationship between the independent and dependent variables.

R Square (Coefficient of Determination): It is 0.089369, representing the proportion of the variance in the dependent variable (Nifty Next 50 price) that is predictable from the independent variable (CPI Inflation rate (%)).

Adjusted R Square: It is -0.001694, adjusted for the number of predictors in the model. In your case, it seems to suggest that the model might not be very reliable.

Standard Error: It is 3733.515, representing the average distance between the observed values and the values predicted by the model. Lower values are better.

Observations: There are 12 data points in the analysis.

# **CHAPTER:6: FINDINGS**



Correlation is a statistical measure that expresses the extent to which two variables are linearly related (meaning they change together at a constant rate). It's a common tool for describing simple relationships without making a statement about cause and effect.

Researcher has found that in analysis of CPI Inflation rate and Nifty Auto, Here the value of r = (-0.142336509), It indicates the negative correlation between Inflation rate and Nifty Automobile. Regression between Inflation rate and Nifty Automobile are is 0.020259682. It indicates that y(Nifty Automobile) is dependent variable on x(CPI Inflation rate). It means Nifty Automobile is 02.02% dependent on CPI Inflation rate.

It is also found that in analysis of CPI Inflation rate and Nifty Bank, Here the value of r=(-0.399530861), It indicates the negative correlation between Inflation rate and Nifty Bank. Regression between Inflation rate and Nifty Bank are is 0.159624909. It indicates that y (Nifty Bank) is dependent variable on x (CPI Inflation rate). It means Nifty Bank is 15.96% dependent on CPI Inflation rate.

Researcher has found that in analysis of CPI Inflation rate and Nifty Financial services, Here the value of r=(-0.10133566), It indicates the negative correlation between Inflation rate and Nifty Financial services. Regression between Inflation rate and Nifty Financial services are is 0. 010268916. It indicates that y (Nifty Financial services) is dependent variable on x (CPI Inflation rate). It means Nifty Financial services is 01.02% dependent on CPI Inflation rate.

Researcher has found that in analysis of CPI Inflation rate and Nifty IT, Here the value of r=(0.430789959), It indicates the

negative correlation between Inflation rate and Nifty IT. Regression between Inflation rate and Nifty IT are is 0.185579989. It indicates that y (Nifty IT) is dependent variable on x(CPI Inflation rate). It means Nifty IT is 18.55% dependent on CPI Inflation rate.

Researcher has found that in analysis of CPI Inflation rate and Nifty Midcap 150, Here the value of r=(-0.03502236), It indicates the negative correlation between Inflation rate and Nifty Midcap 150. Regression between Inflation rate and Nifty Midcap 150 are is 0.001226565. It indicates that y (Nifty Midcap 150) is dependent variable on x (CPI Inflation rate). It means Nifty Midcap 150 is 00.12% dependent on CPI Inflation rate.

Researcher has found that in analysis of CPI Inflation rate and Nifty Next 50, it indicates the negative correlation between Inflation rate and Nifty Next 50. Here the value of r= (-0.298947), It indicates the negative correlation between Inflation rate and Nifty Next 50. Regression between Inflation rate and Nifty Next 50 are is 0.089369. The relation between Inflation rate and Nifty Next 50 is positive. It indicates that y (Nifty Next 50) is dependent variable on x (CPI Inflation rate). It means Nifty Automobile is 08.94% dependent on CPI Inflation rate.

## **CHAPTER:7: CONCLUSION**



From the above study I have drawn the conclusion of this project that, Negative correlation between CPI inflation and NIFTY Next 50: This indicates that higher inflation tends to decrease the performance of the broader Indian stock market index. Low correlation between CPI inflation and sector-specific indices like NIFTY Automobiles, NIFTY Bank, and NIFTY Midcap 150: While these correlations suggest weak relationships, they still imply that inflation might influence specific sectors to varying degrees.

Stronger negative correlation between CPI inflation and NIFTY IT: This indicates that technology companies tend to perform worse in response to increasing inflation. Weak negative correlation between CPI inflation and NIFTY Financial Services Although this correlation is relatively low, it hints at a potential connection between inflation and financial services companies.

In short, Highly Dependent Nifty indices depended on CPI Inflation rate are Nifty IT, Nifty Bank; Medium dependent Nifty indices on CPI Inflation rate is Next 50; Less dependent Nifty indices are Nifty auto, Nifty Financial services, Nifty Midcap 150. The market price of value stocks is usually directly proportional to the rate of inflation. Therefore, when the inflation rate rises, value stocks tend to perform better. On the other hand, Growth stocks have minimal cash flows. Therefore, they have a negative correlation with the rate of inflation.

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