1.1 INTRODUCTION

A capital market is a place where buyers and sellers do the trading of financial securities such as bonds and stocks. Transactions are made by participants, such as individuals and organizations. Calendar irregularities are one of the most important areas of study in Indian capital markets. Historical data is collected and evaluated to obtain connections such as anomalies. These anomalies help predict investors' futures. This study evaluates the performance of stock market anomalies according to various parameters. Historical data were evaluated during this study period. Data were collected for the period 2014-2021. In addition, data is obtained from various indices of the National Stock Exchange. Indices like Nifty 50, Nifty 100, and other leading indicators. The study aims to analyze the anomalies of the stock market. And help investors choose their NSE stocks to invest. This study summarizes our thoughts on the various anomalies that occur in the stock market.

Studying this topic requires an understanding of key concepts of the stock market, anomalies, different types of anomalies, different assumptions made by researchers about anomalies, and more. In economics and finance, anomalies exist when, under certain assumptions, actual results differ from expected results. predictions of the models. Anomalies provide evidence that a particular assumption or model does not fit in reality. A model can be a relatively new model or an older model.

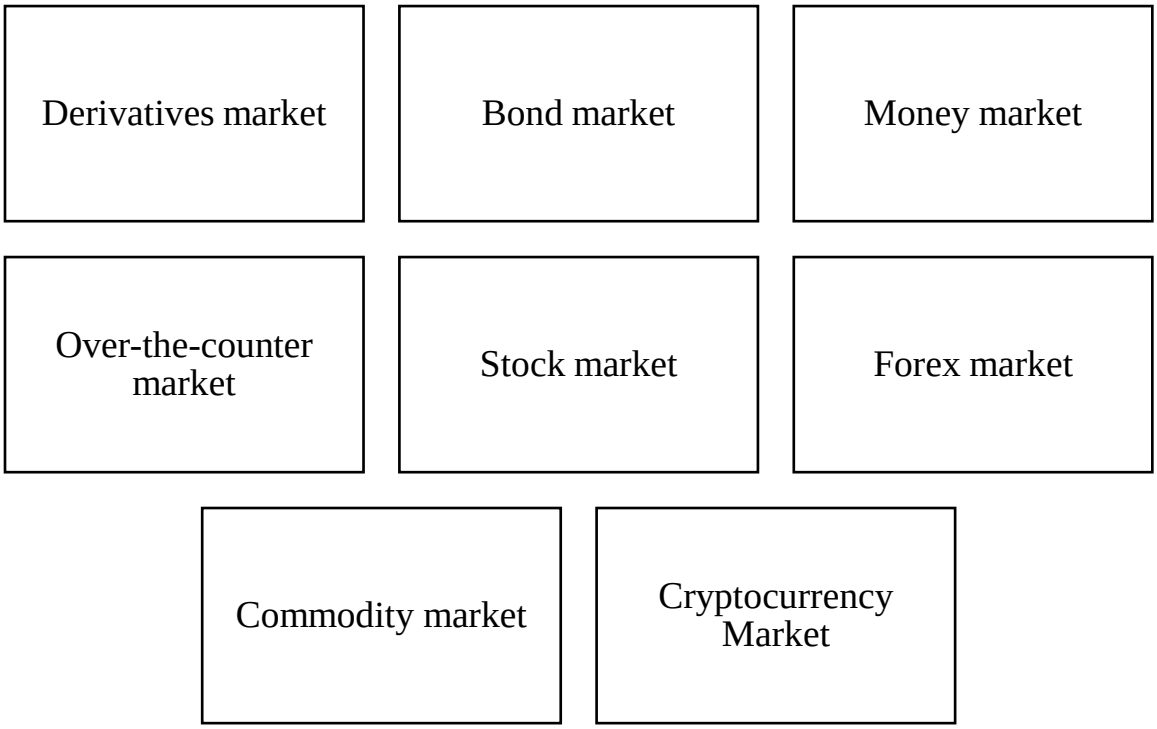
1.1.1 FINANCIAL MARKET

In general, a financial market is any market in which securities are traded, such as the stock market, bond market, foreign exchange market, and derivatives market. Financial markets are required for capitalist economies to function properly.

Financial markets, by allocating resources and creating liquidity for businesses and entrepreneurs, play an important role in facilitating the smooth operation of capitalist economies. The marketplace facilitates the exchange of financial assets between buyers and sellers. Financial markets generate profitable securities products for those with

excess cash (investors/lenders) and make those funds available to those in need of additional funds (borrowers). The stock market is one example of a financial market. Financial markets are formed by the purchase and sale of various financial instruments such as stocks, bonds, currencies, and derivatives. Financial markets rely heavily on information transparency to ensure that prices are appropriate and efficient. Because of macroeconomic forces such as taxes, market prices of securities may not reflect their intrinsic value.

1.1.2 TYPES OF FINANCIAL MARKETS



- **Stock market**

The stock market is the most well-known financial market. These are the places where companies list their shares and where traders and investors buy and sell them. Companies use the stock market, also known as the equity market, to raise capital through an initial public offering (IPO), after which shares are traded between other buyers and sellers. In the secondary market, they compete with each other. Stocks can be traded on publicly traded exchanges like the New York Stock Exchange (NYSE) or the Nasdaq, or they can be bought and sold over the counter (OTC). Most stock trading occurs on regulated stock exchanges, which play an important role in the economy by serving as an indicator of the overall health of the economy and by providing capital gains and dividend income to investors, including those with retirement accounts such as IRAs and 401(k) plans. Typical stock market participants include retail and institutional investors and traders, as well as market makers (MMs) and liquidity and supply specialists. market with two sides A broker is a third party who facilitates transactions between buyers and sellers but does not hold physical stock.

- **Over-the-counter market**

The over-the-counter (OTC) market is a decentralised market in which market participants trade securities directly. It has no physical location and all transactions are done electronically. between two parties without the use of a broker While the over-the-counter market can handle trading in some stocks (for example, smaller or riskier companies that do not meet the criteria for listing on a stock exchange), stock exchanges handle the majority of stock trading. However, some derivatives markets are only available over-the-counter, constituting a significant segment of the financial market. In general, the over-the-counter market and its transactions are less regulated, less liquid, and more opaque.

- **Bond market**

A bond is a financial security in which an investor lends money for a set period of time at a fixed interest rate. A guarantee is an agreement between a lender and a borrower that contains information about the loan and its payments. Bonds are issued to finance projects and operations by corporations, municipalities, states, and sovereign governments. The bond market, for example, sells securities such as bills and bills issued by the United States Department of Treasury. The bond market is also known as the debt market, the credit market, or the fixed income market.

- **Derivatives market**

A derivative may be a contract between two or more parties whose value is based on an agreed upon underlying financial asset (such as a security) or a set of assets (such as an index). Derivatives are secondary securities whose value is calculated solely from the worth of the primary securities with which they are linked. By itself, a derivative has no value. rather than trading stocks directly, the derivatives market trades futures and options, also as other advanced financial products, derive their value from basic instruments like bonds. bonds, commodities, currencies, interest rates, stock indices and stocks. The futures exchange is where futures contracts are listed and traded. Unlike futures, which trade over the counter, futures exchanges use standardized, regulated contract characteristics and use clearing facilities for settlement and settlement. transaction confirmation. Options exchanges, like the Chicago Board of Options Exchange (CBOE), also list and regulate similar options contracts. Futures and options exchanges can list contracts on a spread of assets, like stocks, fixed-income securities, commodities, and more.

- **Money market**

In general, money markets trade products with short maturities that are very liquid (less than a year) and are characterized by a high degree of safety and relatively low yields. At the wholesale level, the money market involves trading in large volumes between institutions and traders. At the retail level, they include money market funds purchased by individual investors and money market accounts opened by bank customers. Individuals can also invest in the money markets by purchasing short-term certificates of deposit (CDs), municipal bills, or U.S. Treasury bills, among other examples.

- **Forex market**

The foreign exchange market (forex) is a market in which participants can buy, sell, hedge and speculate on exchange rates between currency pairs. The foreign exchange market is the most liquid market in the world because cash is the most liquid asset. The forex market handles more than $6.6 trillion in daily transactions, more than the futures and stock markets combined. first Just like the OTC market, the forex market is decentralized and includes a global network of computers and brokers around the world. The foreign exchange market includes banks, trading companies, central banks, investment management companies, hedge funds, brokers and retail investors.

- **Commodity market**

Commodity markets are places where producers and consumers meet to exchange physical goods such as agricultural products (e.g. corn, cattle, soybeans), energy products (oil, gas, credit). carbon), precious metals (gold, silver, platinum) or "soft" commodities (such as cotton, coffee and sugar). These are known as spot commodity markets, where physical goods are exchanged for money. However, the majority of trading in these commodities takes place on derivatives markets that use the spot commodity as the underlying asset. Commodity futures, futures and options

are traded both over the counter and on listed exchanges around the world such as the Chicago Mercantile Exchange (CME) and the Intercontinental Exchange (ICE).

- **Cryptocurrency Market**

The last few years have seen the birth and rise of cryptocurrencies like Bitcoin and Ethereum, decentralized digital assets based on blockchain technology. Today, thousands of crypto tokens are available and traded around the world through a variety of independent online crypto exchanges. These exchanges host digital wallets that allow traders to exchange one cryptocurrency for another or for fiat currencies like dollars or euros. Since the majority of cryptocurrency exchanges are centralized platforms, users are very vulnerable to hacking or fraud. Decentralized exchanges are also available that operate without any central authority. These exchanges allow direct peer-to-peer (P2P) trading of digital currencies without the need for a physical exchange agency to facilitate transactions. Futures and options trading is also available on major cryptocurrencies.

1.1.3 STOCK MARKET

Stock exchange is a term where the shares of companies were traded to investors. They are traded on exchanges. These financial activities are conducted through formal stock exchanges and over-the-counter (OTC) markets that operate under certain regulations. The terms "stock exchange" and "stock exchange" are often used interchangeably. A stock trader is part of the overall stock market. It buys and sells shares on one or more exchanges. This study focuses on market anomalies in the stock market. The stock market provides a safe and regulated environment that allows market participants to trade stocks and other eligible financial instruments with little or no operational risk and with confidence.

Stock markets, which operate under rules set by regulators, operate as primary and secondary markets. As the primary trading venue, stock exchanges allow

companies to issue and publicly sell their shares for the first time in initial public offerings (IPOs). This activity helps companies to raise the necessary funds from investors. The company splits into multiple shares and sells some of these shares to the public at its per share price. To facilitate this process, companies need a market where they can sell these shares. This is done through the bag. Joint-stock companies may also offer additional new shares at a later date through other offers such as rights issues and follow-up offers. Shares can also be redeemed or canceled. Investors hold stocks of companies with the expectation that the stock price will rise, receive dividends, or both. The exchange acts as an intermediary in this capital raising process and receives compensation for its services from the company and its financial partners. Stock exchanges also allow investors to buy and sell securities they already own. This is called the secondary market.

1.1.4 MAJOR FUNCTIONS

The exchange ensures price transparency, liquidity, pricing and fairness in transactions. The Exchange ensures that all interested market participants have access to data from all buy and sell orders, thereby contributing to fair and transparent pricing of securities. The market also ensures efficient matching of buy and sell orders. If the price of a stock is determined jointly by all buyers and sellers, the stock market must support price discovery. Those who are qualified and willing to trade will be able to place orders quickly and the market must ensure that orders are executed at the right price. Stock traders include market makers, investors, traders, speculators, and hedgers. Investors can buy stocks and hold them for long periods of time, and traders can enter and exit positions within seconds. Market makers provide the necessary liquidity in the market, and hedging can trade derivatives.

1.1.5 STOCK MARKET REGULATIONS IN INDIA

The Indian capital market is regulated and supervised by the Ministry of Finance, the Securities and Exchange Board of India and the Reserve Bank of India. The Ministry of Finance regulates through the Economic Affairs and capital Market Division. The Division is responsible for formulating policies regarding the orderly growth and development of the stock market (i.e., equity, debt and derivatives) as well as protecting the interests of Investors. In particular, he is responsible for

- Institutional reform in the stock market,
- Building regulatory and market institutions,
- Strengthen investor protection mechanisms, and
- Provide an effective regulatory framework for the stock market.

The department that administers the laws and rules established under

- The Depositories Act, 1996,
- Securities Contracts (Regulations) Act of 1956 and
- The Securities and Exchange Board of India Act 1992.

1.1.6 MAJOR STOCK EXCHANGES IN INDIA

By size and participation, the two major stock exchanges are :

- National Stock Exchange
- Bombay Stock Exchange.

BOMBAY STOCK EXCHANGE

Bombay Stock Exchange (BSE) is the oldest stock exchange in Asia. Headquartered in Mumbai, India, BSE was founded in 1875 as a Stock Exchange and Stock Broker. Before this, brokers and traders gathered under banyan trees and traded.

BSE acts as the supreme regulator of the stock market, providing a control and monitoring mechanism that can detect anomalies and manipulation of stock prices. The exchange also offers counterparty risk management for all trades that take place on its trading platform through clearing and settlement services. Shares of more than 5000 companies are traded on BSE. In addition to stocks and debt securities, the exchange allows trading of mutual fund shares and derivatives.

The Bombay Stock Exchange was recognized as a stock exchange under the Securities Contracts (Regulation) Act. Their benchmark, the Sensex Index (Sensex), was launched in 1986. In 1995, BSE launched a fully automated trading platform called BSE Online Trading. BOLT system which completely replaced the computer system. In 2005, the stock exchange turned into a legal entity from an ordinary association of brokers. The management structure of the exchange is managed by the board of directors, before which the board of directors sits, and the executive council manages the daily operations of the exchange.

NATIONAL STOCK EXCHANGE

The National Stock Exchange (NSE) was the largest stock exchange in India and the fourth largest in the world by stock trading volume in 2015, according to the World Federation of Exchanges (WFE)). NSE is the first exchange in India to do electronic or screen trading. It started trading in 1994 and ranks as the largest stock exchange in India in terms of total turnover and average daily turnover for shares per year since 1995, based on SEBI data].

NSE has a fully integrated business model that includes exchange listings, trading services, clearing services, indices, market feeds, technology solutions and services. Financial education. The NSE also monitors the compliance of trading and clearing members with the exchange's rules and regulations.

NSE is a technology pioneer and ensures the reliability and performance of its systems through a culture of innovation and investment in technology. NSE believes that the size and breadth of its products and services, coupled with its longstanding leadership positions across multiple asset classes in India and globally, make it highly responsive to needs and changes. markets as well as innovate in commercial and non-commercial activities to provide quality data and services to market players and customers. The department that administers the laws and regulations is established under• Depositories Act, 1996,

- Securities Contracts (Regulations) Act of 1956 and
- The Securities and Exchange Commission of India Act 1992.

1.1.7 TRADING MECHANISM

Trading on both exchanges is done via open electronic limit order books and order matching is performed by trading computers. There are no market makers and the whole process is order to order. This means that market orders placed by investors are automatically matched to the best limit orders. Therefore, both buyers and sellers are anonymous. The advantage of the order market is that it provides greater transparency by displaying all buy and sell orders in the trading system. However, there is no guarantee that an order will be filled in the absence of a market maker. All orders on trading systems must be placed through brokers, many of which offer online retail trading services. Institutional investors can also take advantage of Direct Market Access (DMA) options. This option uses a broker-provided trading terminal to execute trades directly into the exchange’s system. Trading system.

1.1.8 WHO ALL CAN INVEST IN INDIA

India started allowing foreign investment in the 1990s. Foreign investment falls into her two categories: Foreign Direct Investment (FDI) and Foreign Portfolio Investment (FPI). All investments in which the investor participates in the day-to-day management and operation of the company are treated as FDI, while investments in shares where the investor does not control the management and operations are treated as FPI. To make a portfolio investment in India, you must be registered as a Foreign Institutional Investor (FII) or as one of the sub-accounts of one of the FIIs. Both registrations have been approved by the market regulator SEBI. Foreign institutional investors mainly consist of mutual funds, pension funds, endowments, sovereign wealth funds, insurance companies,

banks, asset management companies, etc. Currently, India does not allow foreigners to invest directly in the stock market. However, high net worth individuals (individuals whose net worth exceeds his US$50 million) can register as sub-accounts of the FII. Foreign institutional investors and their subaccounts can invest directly in listed stocks. Most of the portfolio investments consist of investments in primary and secondary market securities including stocks, bonds and warrants of companies listed or to be listed on accredited stock exchanges in India. FIIs may also invest in over-the-counter unlisted securities, subject to pricing approval from the Reserve Bank of India. Finally, you can invest in mutual fund stocks and derivatives traded on any exchange. A registered debt FII can invest 100% of its investment in debt securities. Other FIIs must invest at least 70% of their assets in equities. The remaining 30% will be invested in external capital. FIIs are required to transfer funds to and from India through special Rupee bank accounts for non-residents. Funds in such accounts can be fully repatriated.

1.1.9 FACTORS AFFECTING THE STOCK MARKET

- Supply and demand
- Company-Related Factors
- Investor sentiment for stock market
- Interest rates affecting the stock market
- Efficient market

- **Supply and demand:**

There are so many factors that influence the market. But when you remove the outside world and look at the most basic factors, it's simple. It's supply and demand. As with all commodities, stock prices rise or fall when supply and demand are out of balance. If potatoes suddenly become scarce and people line up to buy them, the price of potatoes will skyrocket. When a company is doing well and everyone wants to buy stock in the same company, the stock price skyrockets and the stock price skyrockets. The opposite happens when there are too many shares available and no one wants to buy them. In this case, the stock price will plummet.

- **Company-Related Factors**

When a company has publicly traded shares, it is clear that everything that happens within the company directly affects the share price. So if a company is going up because of successful product launches, increased revenues, decreased debt, and more inflows of investor capital, then the stock price of the company should go up. From power to power. However, when a company experiences losses, product failures, and debt build-up, the majority of shareholders want to sell their shares in such companies to lower the stock price. Other factors that can cause stock prices to go up or down include changes in company management and mergers and acquisitions.

- **Investor sentiment for stock market**

An investor's own mood can also affect stock prices. Stock market performance is related to how investors invest their money. When investors take more risks and invest more aggressively, stock prices rise. On the other hand, if investors become more cautious and prioritize safety over risk, stock prices will fall. There are two factors in this aspect.

- **Bull market**: A bull market is one in which investors are more confident in taking risks and investing more aggressively. As more people invest with confidence, demand increases, and stock prices rise as a result.
- **Bear market**: A bear market is one in which investors are more concerned about the risks and losses of their investments, and therefore invest with less confidence and safety considerations. This causes the market to stagnate and the stock price to eventually fall.

- **Interest rates affecting the stock market**

Events at the Reserve Bank of India have had a direct impact on stock prices. The RBI determines interest rates in India and changes them regularly to stabilize the Indian economy. Of course, higher interest rates mean businesses have

to pay off more loans, resulting in lower profits. This causes stock prices to fall. Conversely, low interest rates mean that businesses can borrow money from banks at a much lower cost, saving money and generating higher profits. In this case, the stock price will rise.

- **Efficient market**

A market is said to be efficient if it absorbs new information as soon as it arrives. In such circumstances, stock prices are expected to reflect all available information. Therefore, no one can achieve extraordinary returns in the stock market. Seiler and Rom (1997) report a number of studies that disprove this claim.

This efficiency can take three forms:

- Weak
- semi-strong
- strong.

  - **Weak form**

The weak form of the efficient market hypothesis assumes that historical information about stock prices is reflected in current stock prices. Therefore, no excess profit can be made on the basis of information contained in previous price data. This means that technical analysis is useless in predicting future stock prices. Historical information has been adjusted for stock prices, so current stock prices remain unknown. Inefficiency can be tested against historical price data using various econometric and statistical techniques. Studies on less efficient forms are Poshakwale (1996), Jensen (1978), Bondt and Thaler (1985). Several variables are used to test the efficiency of the weak form. Historical stock prices, price/earnings ratios, DIV/P ratios, and book-to-market ratios. used. Technical analysis is also used to test the market efficiency of weak forms

- **Semi-strong form**

The semi-strong form of efficiency assumes that all publicly available information is reflected not only in historical stock prices, but also in current stock prices. Public information may take the form of earnings announcements/forecasts, mergers and acquisitions, stock splits, etc. This means that information gleaned from historical stock prices and publicly available information is not useful in producing extraordinary stock returns (Summers, 1986; Goss, 1983). This means that neither fundamental nor technical analysis can help you derive extraordinary returns from the market. Event studies are useful for testing the efficiency of the half-strength format. Event studies help determine market participants' rate of assimilation of new information

- **Strong form**

In accordance with strong efficiency, all information, whether public or private. reflected in the current stock price. No one can achieve extraordinary returns with this form of efficiency. The existence of insider trading is investigated to test its strong efficiency. However, insider trading is not legally permitted. When a stock price correction is observed before personal information is made public, it indicates a powerful form of efficiency. However, the efficiency of this form is not widespread. Research into the anomaly began when academic researchers demonstrated a spike in the mis-pricing of assets that could not be answered by a given economic theory. It's usually easy to figure out what happened with the benefit of hindsight. However, when they occur exactly, they are difficult to recognize. It also makes integration into equity valuation models more difficult. This could be the profit market speculators receive for their efforts to spot stock market anomalies. Once an anomaly is detected and enough arbitrageurs have taken advantage of it, the anomaly disappears. This is when the anomaly becomes public knowledge and

the pursuit to provide research findings in the financial literature begins. such as expected anomalous returns from Listed below are the main glorious anomalies prevalent in various stock markets.

1.1.10 RECENT DEVELOPMENT OF THE PRIMARY MARKET

The primary capital market, also known as the initial offering market, is the market where companies can mobilize resources through various vehicles such as equities, preferred stock and debentures/bonds. The primary market provides a channel for selling securities. Security issuers offer new securities on the primary market to raise investment capital. They do this through public or private placements. Whether a person who wishes to register can register is a public matter. Issuing to selected people is called private placement. For purposes of the Companies Act 1956, it is a public matter when it is assigned to 50 or more persons. This means that one of the problems caused by fewer than 50 people is private placements.

There are two main types of issuers that issue securities: corporates and governments. Corporations primarily issue bonds (bonds) and stocks (equities), while governments (both central and state) issue bonds (treasury bills and maturity bills). There are good reasons to raise capital through an IPO, including: In terms of issuance methods, the primary market facilitates public offerings in the form of prospectuses, rights issuances through offer letters, and resource mobilization through private placements. His IPO of the company to raise funds on the market is known as an initial public offering (IPO). Essentially, an IPO is a company's first step toward going public. Newly established companies generally follow his IPO route to raise the required capital. If a company going through the IPO route to raise capital fails, it can still go public, but only as part of the book building process.

Book building is the process of determining the issue price based on bids received for shares of the company issuing the shares. The past decade has been impressive in many ways for the Indian securities market as a whole. It has experienced tremendous

growth in terms of the amount raised from the market, the number of exchanges and other intermediaries, the number of listed shares, market capitalization, trading volume and trading volume on exchanges, and the investor population. Along with this growth, the profile of investors, issuers and intermediaries has changed significantly. The surge in equity market activity, particularly in the 1990s, may reflect increased participation from both retail and institutional investors.

In the 1990s, the stock exchange became an important source of funding for trade and industry. More and more companies are basing their business on the market instead of on bank loans. The average annual capital mobilization from the primary market, which in the 1970s was around Rs. Increased beyond that of non-state enterprises. From 199 to 1995, he said, the number of years the capital raised rose to Rs 2,6 1.7 crore. From 1991/92 to 1996/97 he had a surprisingly high total issuance for his six years. However, from mid-September 199 onwards, the continuing decline in the stock market affected the issuance market, with the corporate sector's issuance plummeting in 1995-1996 and falling to 1.0 1 billion in 1996-97. Down to the Rupee. However, in 1995-1996, the market dried up due to a combination of supply and demand factors.

Many investors were skeptical of private placements against non-compliant securities fraud, so they waited for quality issues. Wealthier subscribers of banks, financial institutions, mutual funds, etc. The issuer's agent, the dealer/investment bank, acts as an intermediary and connects the issuer and the investor. Access to the private market has several advantages over public issuance. This is a cheap and effective way to raise funds and does not require detailed compliance with official procedures or withdrawal procedures. State-owned enterprises face cuts in the budget available in the primary market to meet their resource needs. The proposed transaction entered the capital markets and was funded through exchanges to meet capital adequacy standards. Development finance institutions entered the market to raise funds through equity issuances as support from the National Reserve Bank (RBI) cut concessional support to them. It has always been institutionalized and people prefer mutual funds6 as an investment. Starting with his asset base of Rs 2.5 billion in 196 , the company managed his assets of Rs 121.80 crore. In 199

-1995, funds raised through the securities markets for new issues accounted for about four-fifths of financial institution (FI) spending. Issuers switched to other forms of investment, such as mutual funds, and investor sentiment soured after the 1992 securities fraud scandal.

The sector was licensed to enter the mutual aid industry in 1992-1993. As the market has become more institutionalized, people have turned to mutual funds as an investment vehicle. Net income from some mutual funds has increased to Rs 1995.3 billion over the decade since 1999. This means that from 2000 to 2001 he decreased by 11,135 tax revenues from decentralized debt-oriented mutual funds, and from 2002 to 2003 he increased again. The Indian capital market was opened to investment by institutional investors (FILS) in September 1992. The capital investment is made by a foreign institutional investor (Fil). Foreign Direct Investment (FDI) and secondly, through capital markets where FIIs can invest in Indian companies and earn a partial interest. This is known as a foreign portfolio investment. Indian companies were allowed to source resources from abroad through Global Depositary Receipts (GDRs) and Foreign Currency Convertible Bonds (FCCBs). Such huge inflows of funds, especially from foreign investors, have further increased the need for regulators to closely monitor market activity.6 Late June 2003.

1.1.11 RECENT DEVELOPMENTS OF SECONDARY MARKET

Stock market performance can be measured using both primary and secondary market activity. Issues already on the primary market are traded on the secondary market. In the secondary market, participants holding securities can adjust their holdings to reflect changes in risk/reward valuations. Secondary markets have worked wonders with the emergence of derivatives markets. After the first stock exchange in Mumbai, separate stock exchanges were established in Ahmedabad and Calcutta in 189 and 1908 respectively. A stock exchange is a voluntary organization formed by a group of individuals to provide an institutional framework under which stocks can be traded. The exchange's monetary policy guidelines are based on the exchange's statutes and resolutions

of its board of directors. Trading volumes in the equities segment of the exchange have seen impressive growth in recent years.

The Indian stock market is increasingly industry-oriented. Over a period of time, the indicators have exhibited an ascending, bearish, or even range-trending trend. However, since the constituent sectors determine the global indices, investors need a flexible investment solution to invest in all sectors depending on their attractiveness in different regions. Different times. In addition, if the situation requires capital invested by the investor, the investor should also have the opportunity to diversify into many different areas. The last few years, i.e. 2004-05 and 2005-06, have really been glorious for equity investors, due to lower interest rates. Minus some possible risks, a rate cut is largely predictable. In the event that profits become low and the market experiences intermittent fluctuations, investors should invest with caution and the market situation should be carefully considered. The market has held up relatively well in the face of global turmoil, high oil prices and a below-normal monsoon. Industrial production is also picking up. Finally, business confidence appears to be growing as an uplifting premise to stifle business activity. While past performance is not an indicator of future performance, so, it tends to continue to believe that despite occasional disappointments, the Indian stock market remains attractive and investors should continue to allocate an appropriate portion of their money to stocks.

Investors need to recognize that value creation is not an overnight achievement, it is an ongoing journey. The primary and secondary segments of the capital markets are closely related. The dramatic increase in stock market activity, especially in his 1990s, was due to the increased participation of individual and institutional investors. Investing in the market when the market is often volatile leaves investors vulnerable. It is therefore the duty of governments and regulators to curb the frequent volatility of the stock market and maintain investor confidence. Household sector portfolios shift to physical assets and fixed income products whenever stock market anomalies occur. A well-functioning secondary market gives investors the opportunity to sell their securities,

lowering the issuer's cost of capital. Recently, Sons' investment has become a key factor in the development of Indian stocks.

When it comes to stock trading, India can be considered one of the pioneers in South Asia. The stock market offers investors the opportunity to protect their savings against inflationary fluctuations. With the increasing reliance of Indian companies on the stock market, the size of stock exchanges and the number of investors has increased significantly. If the stock market is used as an efficient capital allocation mechanism, its integrity must be protected. There are often many destructive forces that tend to destroy the sanctity of the market. Intervention is required to effectively control impediments to the efficient and effective functioning of the stock market. A central issue in stock exchange regulation is investor protection. Governing bodies impose protective controls and regulate relationships between participants.

1.2 STATEMENT OF THE PROBLEM

There are various stock market anomalies has been evolved in the Indian stock markets. Monday effect, Friday effects, calendar effects, month-end effect, year-end effect, festival effects, etc. But, according to various researchers, it is different. Some of them say that there are anomalies in the stock market. While other say there is no anomalies. So, this study helps to understand and evaluate the effectiveness of the stock market anomalies, their reason, and the benefits of anomalies to the investors.

1.3 OBJECTIVES OF THE STUDY

- To evaluate the effectiveness of stock market anomalies
- To understand the reasons for the anomalies for the period 2014 to 2021
- To understand whether anomalies help the investors

1.4 SCOPE OF THE STUDY

The survey is highly relevant to the new economic scenario. Most people these days focus on the stock market, which produces more returns. Certain market anomalies are forming in the Indian market, which is very helpful for investors. Whenever a particular pattern of returns occurs, it presents a great opportunity to make a profit. Therefore, investigation becomes more important in this scenario. December effect, January effect, month-end effect, etc. provide investors with an indication of historical returns and help them predict and invest in specific sectors at specific times. If there are no anomalies, new theories are created, helping investors save time looking for unnecessary anomalies.

1.5 SIGNIFICANCE OF THE STUDY

These days people are more conscious about the treatment methods. They research and analyze different methods to increase their wealth. Stock market anomalies are anomalies created by reference to past data and the repetition of specific patterns in the stock market. If the effect were to occur, there would be more help for investors in picking stocks for a particular time period. If there are no results, this will help investors study the details of anomalies and help them focus more on other analytical methods.

So, the research is therefore of greater impact and importance for investors who need to understand the existence of anomalies in the NSE indices and also help in doing the right things for portfolio selection, investment and timing of investment.

1.6 INDUSTRY PROFILE

This study focuses on stock market anomalies on the National Stock Exchange and its indices. It uses indices such as Nifty 50, Nifty 100, Nifty Auto, Nifty FMCG, Nifty Metal, Nifty Bank, Nifty IT, Nifty Media and Nifty Reality. Therefore, this study requires an understanding of NSE's relevance and the importance of its indices in the Indian stock market.

When global headwinds intensified and foreign investors began to lose confidence in the Indian stock market, it was domestic investors who filled the gap. Her belief in India's growth story and strong economic fundamentals seemed unwavering. According to a Morgan Stanley research report, foreign portfolio investor (FPI) holdings in a sample of 75 Indian companies have fallen by around 230 basis points (bps) since 2015 to 24.8%. Domestic mutual funds (MF) increased their holdings. over 100. Over the same period, it rose 580 basis points to 9.5% and retail investors rose 157 basis points to 9%. The FPI sale has been running since October last year. In the nine months from October, investors sold part of their Rs 2.56 crore net worth due to various factors including geopolitical uncertainty and central bank tightening. In June alone, FPI surpassed his 50,000 kronor. This was the worst sale in almost two years. However, the tide turned in July when a foreign investor became a net buyer, investing Rs 500 crore in the Indian market. But his recent sale of FPI isn't the only reason domestic investors are ahead. Let's look at a larger example. 1,770 companies are listed on the NSE and entry templates are available. Of these companies, the proportion of Domestic Institutional Investors (DII) and Individual and High Net Worth Investors (HNI) in NSE-listed companies reached a record high of 23.53% by the end of June. Did it. Prime Infobase.

Domestic investors include domestic institutions such as mutual funds, insurance companies and pension funds. The share of mutual fund holdings in Indian companies increased from 4.99% in FY2017 to 7.75% in FY2022. A large influx of individual investors into the stock market through systematic investment schemes and his SIP also contributed to the increase in domestic investment. According to available data, he has about 55.5 million of his SIP accounts in mutual funds that investors regularly invest in. Since FY2017, SIP contributions nearly tripled to Rs 1.24 trillion in FY22. According to data from the Institute of Investment Trusts of India, SIP's assets under management (AUM) reached Rs 5.76 billion at the end of FY22, marking a CAGR of over 30% over the past five years. Total holdings by retail investors increased from 6.79% in FY2017 to 7.42% by the end of FY2022, and the market has seen a steady increase in his EPF shares in Indian pension funds since 2015. EPFO has invested approximately INR 1.23 trillion in

Exchange Traded Funds (ETFs) by FY2021. They have also invested in a pool of public sector companies over the years.

1.6.1 NATIONAL STOCK EXCHANGE

National Stock Exchange of India Limited is one of the leading financial exchanges in the country, headquartered in Mumbai. Since its founding in 1992, it has evolved into a sophisticated and automated electronic system that provides trading opportunities to investors across the country. In 2015, the exchange ranked 4th in the world in terms of trading volume. The exchange was established in 1994 at the request of the Indian government to bring transparency to the country's capital markets. Founded by a group of major financial institutions and recommended by the Pherwani Commission, the exchange includes a wide range of participants from local and foreign investors. This is also the first exchange in the country to introduce an electronic trading system, making it easy to integrate investors across the country into a single center. In 2018, the market capitalization of the NSE surpassed 2.25 trillion USD, ranking 11th in the list of the largest stock exchanges in the world.

1.6.2 NIFTY

Nifty is an index used by the National Stock Exchange and is made up of a combination of National and Fifty (Nifty). Unlike Sensex, Nifty collects samples of 50 stocks and effective tricks to identify market trends. Similar to Sensex, Nifty selects stocks from different sectors. Some of those include stocks from sectors like IT, consumer goods, financial services, automotive, telecommunications, and more. In addition, the stocks selected by Nifty are those that have outperformed other stocks. The criteria to qualify for Nifty are –

- Creditial
- Float adjustment
- Residence

Selected indices for the study:

- → Nifty 50
- → Nifty 100
- → Auto
- → FMCG
- → Metal
- → Bank
- → IT
- → Finserve
- → Media
- → Reality

1.6.3 NIFTY 50

The NIFTY 50 is a benchmark Indian stock market index that represents the weighted common of fifty of the most important Indian organizations indexed on the National Stock Exchange. It is one of the primary inventory indices utilized in India, the opposite being the BSE SENSEX. Nifty 50 is owned and controlled via way of means of NSE Indices (formerly referred to as India Index Services & Products Limited), that's a fully owned subsidiary of the NSE Strategic Investment Corporation Limited. NSE Indices had a owned and licensing agreement with Standard & Poor`s for co-branding equity indices till 2013. The Nifty 50 index become released on 22 April 1996, and is one of the many stock indices of Nifty. The NIFTY 50 index has formed as much as be the most important single economic product in India, with an atmosphere along with exchange-traded funds (onshore and offshore), exchange-traded alternatives at NSE, and futures and alternatives overseas on the SGX. NIFTY 50 is the world's maximum actively traded contract. WFE, IOM and FIA surveys advocate NSE's management position. The NIFTY 50 index covers thirteen sectors (as on 30 April 2021) of the Indian financial system and gives funding managers publicity to the Indian marketplace in a single portfolio. Between 2008 & 2012, the NIFTY 50 index's proportion of NSE's marketplace capitalisation fell from 65% to 29% because of the upward thrust of sectoral indices like NIFTY Bank,

NIFTY IT, NIFTY Pharma, NIFTY SERV SECTOR, NIFTY Next 50, etc. The NIFTY 50 index weights financial services at 39.47%, energy at 15.31%, IT at 13.01%, consumer goods at 12.38%, automotive at 6.11%, and agriculture at 0%. The NIFTY 50 Index is a loose flow marketplace capitalization weighted index.

The index become originally calculated the use of the complete marketplace capitalization method. On 26 June 2009 the calculation become modified to the floating factor method. The base duration for the NIFTY 50 Index is November 3, 1995. This is the date his year-long operation of the inventory market segment of the National Stock Exchange ended. The base value of the index become set at a thousand and the base capital become set at Rs.2.6 trillion.The companies in NIFTY 50 are:

Sl. No	Company Name	Industry	NSE Code	ISIN Code
1	Adani Ports and Special Economic Zone Ltd.	Services	ADANIPORTS	INE742F01042
2	Apollo Hospitals Enterprise Ltd.	Healthcare	APOLLOHOSP	INE437A01024
3	Asian Paints Ltd.	Consumer Durables	ASIANPAINT	INE021A01026
4	Axis Bank Ltd.	Financial Services	AXISBANK	INE238A01034
5	Bajaj Auto Ltd.	Automobile and Auto Components	BAJAJ-AUTO	INE917I01010
6	Bajaj Finance Ltd.	Financial Services	BAJFINANCE	INE296A01024
7	Bajaj Finserv Ltd.	Financial Services	BAJAJFINSV	INE918I01018
8	Bharat Petroleum Corporation Ltd.	Oil Gas & Consumable Fuels	BPCL	INE029A01011
9	Bharti Airtel Ltd.	Telecommunicatio n	BHARTIARTL	INE397D01024

10	Britannia Industries Ltd.	Fast Moving Consumer Goods	BRITANNIA	INE216A01030
11	Cipla Ltd.	Healthcare	CIPLA	INE059A01026
12	Coal India Ltd.	Oil Gas & Consumable Fuels	COALINDIA	INE522F01014
13	Divi's Laboratories Ltd.	Healthcare	DIVISLAB	INE361B01024
14	Dr. Reddy's Laboratories Ltd.	Healthcare	DRREDDY	INE089A01023
15	Eicher Motors Ltd.	Automobile and Auto Components	EICHERMOT	INE066A01021
16	Grasim Industries Ltd.	Construction Materials	GRASIM	INE047A01021
17	HCL Technologies Ltd.	Information Technology	HCLTECH	INE860A01027
18	HDFC Bank Ltd.	Financial Services	HDFCBANK	INE040A01034
19	HDFC Life Insurance Company Ltd.	Financial Services	HDFCLIFE	INE795G01014
20	Hero MotoCorp Ltd.	Automobile and Auto Components	HEROMOTOCO	INE158A01026
21	Hindalco Industries Ltd.	Metals & Mining	HINDALCO	INE038A01020
22	Hindustan Unilever Ltd.	Fast Moving Consumer Goods	HINDUNILVR	INE030A01027
23	Housing Development Finance Corporation Ltd.	Financial Services	HDFC	INE001A01036
24	ICICI Bank Ltd.	Financial Services	ICICIBANK	INE090A01021

25	ITC Ltd.	Fast Moving Consumer Goods	ITC	INE154A01025
26	IndusInd Bank Ltd.	Financial Services	INDUSINDBK	INE095A01012
27	Infosys Ltd.	Information Technology	INFY	INE009A01021
28	JSW Steel Ltd.	Metals & Mining	JSWSTEEL	INE019A01038
29	Kotak Mahindra Bank Ltd.	Financial Services	KOTAKBANK	INE237A01028
30	Larsen & Toubro Ltd.	Construction	LT	INE018A01030
31	Mahindra & Mahindra Ltd.	Automobile and Auto Components	M&M	INE101A01026
32	Maruti Suzuki India Ltd.	Automobile and Auto Components	MARUTI	INE585B01010
33	NTPC Ltd.	Power	NTPC	INE733E01010
34	Nestle India Ltd.	Fast Moving Consumer Goods	NESTLEIND	INE239A01016
35	Oil & Natural Gas Corporation Ltd.	Oil Gas & Consumable Fuels	ONGC	INE213A01029
36	Power Grid Corporation of India Ltd.	Power	POWERGRID	INE752E01010
37	Reliance Industries Ltd.	Oil Gas & Consumable Fuels	RELIANCE	INE002A01018
38	SBI Life Insurance Company Ltd.	Financial Services	SBILIFE	INE123W0101 6
39	Shree Cement Ltd.	Construction Materials	SHREECEM	INE070A01015

40	State Bank of India	Financial Services	SBIN	INE062A01020
41	Sun Pharmaceutical Industries Ltd.	Healthcare	SUNPHARMA	INE044A01036
42	Tata Consultancy Services Ltd.	Information Technology	TCS	INE467B01029
43	Tata Consumer Products Ltd.	Fast Moving Consumer Goods	TATACONSUM	INE192A01025
44	Tata Motors Ltd.	Automobile and Auto Components	TATAMOTORS	INE155A01022
45	Tata Steel Ltd.	Metals & Mining	TATASTEEL	INE081A01020
46	Tech Mahindra Ltd.	Information Technology	TECHM	INE669C01036
47	Titan Company Ltd.	Consumer Durables	TITAN	INE280A01028
48	UPL Ltd.	Chemicals	UPL	INE628A01036
49	UltraTech Cement Ltd.	Construction Materials	ULTRACEMCO	INE481G01011
50	Wipro Ltd.	Information Technology	WIPRO	INE075A01022

1.6.4 NIFTY 100

The NIFTY 100 is a diverse index made up of 100 equities that represent important economic sectors. The top 100 firms out of the NIFTY 500's total market capitalization are represented by the NIFTY 100. This index is used to assess how well large market capitalization corporations are performing. The performance of a combined portfolio of two indices, the NIFTY 50 and the following NIFTY 50, is tracked by the NIFTY 100. NSE Indices Limited, formerly known as India Index Services & Products Limited, is the owner and manager of the NIFTY 100. (NSE Indices). An Indian specialty company called NSE Indices concentrates on indices like commodity indices.

- The NIFTY 100 index represents approximately 76.8% of the market capitalization of NSE-listed stocks as of March 29, 2019.
- Total trading value for the past six months ended. in March 2019 of all components of the index was approximately 66.2% of the trading value of all stocks on the NSE.

Companies listed in NIFTY 100 are:

Sl.No	Company Name	Industry	NSE code	ISIN Code
1	ACC Ltd.	Construction Materials	ACC	INE012A01025
2	Adani Enterprises Ltd.	Metals & Mining	ADANIENT	INE423A01024
3	Adani Green Energy Ltd.	Power	ADANIGREEN	INE364U01010
4	Adani Ports and Special Economic Zone Ltd.	Services	ADANIPORTS	INE742F01042
5	Adani Transmission Ltd.	Power	ADANITRANS	INE931S01010
6	Ambuja Cements Ltd.	Construction Materials	AMBUJACEM	INE079A01024
7	Apollo Hospitals Enterprise Ltd.	Healthcare	APOLLOHOSP	INE437A01024
8	Asian Paints Ltd.	Consumer Durables	ASIANPAINT	INE021A01026
9	Avenue Supermarts Ltd.	Consumer Services	DMART	INE192R01011
10	Axis Bank Ltd.	Financial Services	AXISBANK	INE238A01034

11	Bajaj Auto Ltd.	Automobile and Auto Components	BAJAJ-AUTO	INE917I01010
12	Bajaj Finance Ltd.	Financial Services	BAJFINANCE	INE296A01024
13	Bajaj Finserv Ltd.	Financial Services	BAJAJFINSV	INE918I01018
14	Bajaj Holdings & Investment Ltd.	Financial Services	BAJAJHLDNG	INE118A01012
15	Bandhan Bank Ltd.	Financial Services	BANDHANBNK	INE545U01014
16	Bank of Baroda	Financial Services	BANKBARODA	INE028A01039
17	Berger Paints India Ltd.	Consumer Durables	BERGEPAINT	INE463A01038
18	Bharat Petroleum Corporation Ltd.	Oil Gas & Consumable Fuels	BPCL	INE029A01011
19	Bharti Airtel Ltd.	Telecommunication	BHARTIARTL	INE397D01024
20	Biocon Ltd.	Healthcare	BIOCON	INE376G01013
21	Bosch Ltd.	Automobile and Auto Components	BOSCHLTD	INE323A01026

22	Britannia Industries Ltd.	Fast Moving Consumer Goods	BRITANNIA	INE216A01030
23	Cholamandalam Investment and Finance Company Ltd.	Financial Services	CHOLAFIN	INE121A01024
24	Cipla Ltd.	Healthcare	CIPLA	INE059A01026
25	Coal India Ltd.	Oil Gas & Consumable Fuels	COALINDIA	INE522F01014
26	Colgate Palmolive (India) Ltd.	Fast Moving Consumer Goods	COLPAL	INE259A01022
27	DLF Ltd.	Realty	DLF	INE271C01023
28	Dabur India Ltd.	Fast Moving Consumer Goods	DABUR	INE016A01026
29	Divi's Laboratories Ltd.	Healthcare	DIVISLAB	INE361B01024
30	Dr. Reddy's Laboratories Ltd.	Healthcare	DRREDDY	INE089A01023
31	Eicher Motors Ltd.	Automobile and Auto Components	EICHERMOT	INE066A01021

32	FSN E-Commerce Ventures Ltd.	Consumer Services	NYKAA	INE388Y01029
33	GAIL (India) Ltd.	Oil Gas & Consumable Fuels	GAIL	INE129A01019
34	Gland Pharma Ltd.	Healthcare	GLAND	INE068V01023
35	Godrej Consumer Products Ltd.	Fast Moving Consumer Goods	GODREJCP	INE102D01028
36	Grasim Industries Ltd.	Construction Materials	GRASIM	INE047A01021
37	HCL Technologies Ltd.	Information Technology	HCLTECH	INE860A01027
38	HDFC Asset Management Company Ltd.	Financial Services	HDFCAMC	INE127D01025
39	HDFC Bank Ltd.	Financial Services	HDFCBANK	INE040A01034
40	HDFC Life Insurance Company Ltd.	Financial Services	HDFCLIFE	INE795G01014
41	Havells India Ltd.	Consumer Durables	HAVELLS	INE176B01034

42	Hero MotoCorp Ltd.	Automobile and Auto Components	HEROMOTOCO	INE158A01026
43	Hindalco Industries Ltd.	Metals & Mining	HINDALCO	INE038A01020
44	Hindustan Unilever Ltd.	Fast Moving Consumer Goods	HINDUNILVR	INE030A01027
45	Housing Development Finance Corporation Ltd.	Financial Services	HDFC	INE001A01036
46	ICICI Bank Ltd.	Financial Services	ICICIBANK	INE090A01021
47	ICICI Lombard General Insurance Company Ltd.	Financial Services	ICICIGI	INE765G01017
48	ICICI Prudential Life Insurance Company Ltd.	Financial Services	ICICIPRULI	INE726G01019
49	ITC Ltd.	Fast Moving Consumer Goods	ITC	INE154A01025
50	Indian Oil Corporation Ltd.	Oil Gas & Consumable Fuels	IOC	INE242A01010

51	Indus Towers Ltd.	Telecommunication	INDUSTOWER	INE121J01017
52	IndusInd Bank Ltd.	Financial Services	INDUSINDBK	INE095A01012
53	Info Edge (India) Ltd.	Consumer Services	NAUKRI	INE663F01024
54	Infosys Ltd.	Information Technology	INFY	INE009A01021
55	InterGlobe Aviation Ltd.	Services	INDIGO	INE646L01027
56	JSW Steel Ltd.	Metals & Mining	JSWSTEEL	INE019A01038
57	Jubilant Foodworks Ltd.	Consumer Services	JUBLFOOD	INE797F01020
58	Kotak Mahindra Bank Ltd.	Financial Services	KOTAKBANK	INE237A01028
59	Larsen & Toubro Infotech Ltd.	Information Technology	LTI	INE214T01019
60	Larsen & Toubro Ltd.	Construction	LT	INE018A01030
61	Life Insurance Corporation of India	Financial Services	LICI	INE0J1Y01017
62	Lupin Ltd.	Healthcare	LUPIN	INE326A01037

63	Mahindra & Mahindra Ltd.	Automobile and Auto Components	M&M	INE101A01026
64	Marico Ltd.	Fast Moving Consumer Goods	MARICO	INE196A01026
65	Maruti Suzuki India Ltd.	Automobile and Auto Components	MARUTI	INE585B01010
66	MindTree Ltd.	Information Technology	MINDTREE	INE018I01017
67	Muthoot Finance Ltd.	Financial Services	MUTHOOTFIN	INE414G01012
68	NTPC Ltd.	Power	NTPC	INE733E01010
69	Nestle India Ltd.	Fast Moving Consumer Goods	NESTLEIND	INE239A01016
70	Oil & Natural Gas Corporation Ltd.	Oil Gas & Consumable Fuels	ONGC	INE213A01029
71	One 97 Communications Ltd.	Financial Services	PAYTM	INE982J01020
72	PI Industries Ltd.	Chemicals	PIIND	INE603J01030

73	Pidilite Industries Ltd.	Chemicals	PIDILITIND	INE318A01026
74	Power Grid Corporation of India Ltd.	Power	POWERGRID	INE752E01010
75	Procter & Gamble Hygiene & Health Care Ltd.	Fast Moving Consumer Goods	PGHH	INE179A01014
76	Punjab National Bank	Financial Services	PNB	INE160A01022
77	Reliance Industries Ltd.	Oil Gas & Consumable Fuels	RELIANCE	INE002A01018
78	SBI Cards and Payment Services Ltd.	Financial Services	SBICARD	INE018E01016
79	SBI Life Insurance Company Ltd.	Financial Services	SBILIFE	INE123W01016
80	SRF Ltd.	Chemicals	SRF	INE647A01010
81	Shree Cement Ltd.	Construction Materials	SHREECEM	INE070A01015
82	Siemens Ltd.	Capital Goods	SIEMENS	INE003A01024
83	State Bank of India	Financial Services	SBIN	INE062A01020

84	Steel Authority of India Ltd.	Metals & Mining	SAIL	INE114A01011
85	Sun Pharmaceutical Industries Ltd.	Healthcare	SUNPHARMA	INE044A01036
86	Tata Consultancy Services Ltd.	Information Technology	TCS	INE467B01029
87	Tata Consumer Products Ltd.	Fast Moving Consumer Goods	TATACONSUM	INE192A01025
88	Tata Motors Ltd.	Automobile and Auto Components	TATAMOTORS	INE155A01022
89	Tata Power Co. Ltd.	Power	TATAPOWER	INE245A01021
90	Tata Steel Ltd.	Metals & Mining	TATASTEEL	INE081A01020
91	Tech Mahindra Ltd.	Information Technology	TECHM	INE669C01036
92	Titan Company Ltd.	Consumer Durables	TITAN	INE280A01028
93	Torrent Pharmaceuticals Ltd.	Healthcare	TORNTPHARM	INE685A01028
94	UPL Ltd.	Chemicals	UPL	INE628A01036

95	UltraTech Cement Ltd.	Construction Materials	ULTRACEMCO	INE481G01011
96	United Spirits Ltd.	Fast Moving Consumer Goods	MCDOWELL-N	INE854D01024
97	Vedanta Ltd.	Metals & Mining	VEDL	INE205A01025
98	Wipro Ltd.	Information Technology	WIPRO	INE075A01022
99	Zomato Ltd.	Consumer Services	ZOMATO	INE758T01015
100	Zydus Lifesciences Ltd.	Healthcare	ZYDUSLIFE	INE010B01027

1.6.5 NIFTY AUTO

The NIFTY Auto Index is made to reflect how the automotive industry has performed and behaved in the financial markets. There are 15 publicly traded and tradeable firms that make up the NIFTY Auto Index. The index includes industries associated to the automobile industry, including tyres, vehicle accessories, 2- and 3-wheelers, and 4-wheelers. The free-floating market capitalization method is used to generate the NIFTY Auto Index, and the index grade represents the total free-floating market value of all the companies in the index relative to the market capitalization. NIFTY Auto Index can be 40tilized for a number of things, including index fund launches, ETFs, and structured products, as well as fund portfolio review.

Companies listed in Nifty Auto:

Sl.No	Company Name	Symbol	ISIN Code
1	Ashok Leyland Ltd.	ASHOKLEY	INE208A01029
2	Bajaj Auto Ltd.	BAJAJ-AUTO	INE917I01010
3	Balkrishna Industries Ltd.	BALKRISIND	INE787D01026
4	Bharat Forge Ltd.	BHARATFORG	INE465A01025
5	Bosch Ltd.	BOSCHLTD	INE323A01026
6	Eicher Motors Ltd.	EICHERMOT	INE066A01021
7	Escorts Kubota Ltd.	ESCORTS	INE042A01014
8	Hero MotoCorp Ltd.	HEROMOTOCO	INE158A01026

9	MRF Ltd.	MRF	INE883A01011
10	Mahindra & Mahindra Ltd.	M&M	INE101A01026
11	Maruti Suzuki India Ltd.	MARUTI	INE585B01010
12	Sona BLW Precision Forgings Ltd.	SONACOMS	INE073K01018
13	TVS Motor Company Ltd.	TVSMOTOR	INE494B01023
14	Tata Motors Ltd.	TATAMOTORS	INE155A01022
15	Tube Investments of India Ltd.	TIINDIA	INE974X01010

1.6.6 NIFTY FMCG

The NIFTY FMCG Index, which measures the behaviour and performance of fast-moving consumer goods, is a market-available, non-durable mass-market product. 15 FMCG stocks listed on the National Stock Exchange make up the NIFTY FMCG Index (NSE). The NIFTY FMCG Index is produced using the free float market capitalization approach, where the index grade reflects the total free float market value of all the stocks in the index relative to the market capitalization of an exchange. particular underlying securities The NIFTY FMCG Index can be used for a number of things, including the evaluation of fund portfolios, the introduction of index funds, ETFs, and structured products.

Companies listed in NIFTY FMCG

Sl.No	Company Name	Nse Code	ISIN Code
1	Britannia Industries Ltd.	BRITANNIA	INE216A01030
2	Colgate Palmolive (India) Ltd.	COLPAL	INE259A01022
3	Dabur India Ltd.	DABUR	INE016A01026
4	Emami Ltd.	EMAMILTD	INE548C01032
5	Godrej Consumer Products Ltd.	GODREJCP	INE102D01028
6	Hindustan Unilever Ltd.	HINDUNILVR	INE030A01027
7	ITC Ltd.	ITC	INE154A01025
8	Marico Ltd.	MARICO	INE196A01026
9	Nestle India Ltd.	NESTLEIND	INE239A01016

10	Procter & Gamble Hygiene & Health Care Ltd.	PGHH	INE179A01014
11	Radico Khaitan Ltd	RADICO	INE944F01028
12	Tata Consumer Products Ltd.	TATACONSUM	INE192A01025
13	United Breweries Ltd.	UBL	INE686F01025
14	United Spirits Ltd.	MCDOWELL-N	INE854D01024
15	Varun Beverages Ltd.	VBL	INE200M01013

1.6.7 NIFTY METAL

The NIFTY Metals Index is meant to reflect how the metals industry behaves and performs (including mining). Up to 15 National Stock Exchange-listed stocks make up the NIFTY Metals Index (NSE). The free-floating market capitalization method

is used to generate the NIFTY Metals Index, and the index grade represents the total free-floating market value of all the stocks included in the index in relation to market capitalization. The NIFTY Metals Index can be used for a number of things, including index fund launches, ETFs, and structured products, as well as fund portfolio review.

Companies listed in NIFTY METAL are:

Sl.No	Company Name	NSE Code	ISIN Code
1	APL Apollo Tubes Ltd.	APLAPOLLO	INE702C01027
2	Adani Enterprises Ltd.	ADANIENT	INE423A01024
3	Hindalco Industries Ltd.	HINDALCO	INE038A01020
4	Hindustan Copper Ltd.	HINDCOPPER	INE531E01026
5	Hindustan Zinc Ltd.	HINDZINC	INE267A01025
6	JSW Steel Ltd.	JSWSTEEL	INE019A01038
7	Jindal Stainless Ltd.	JSL	INE220G01021
8	Jindal Steel & Power Ltd.	JINDALSTEL	INE749A01030
9	MOIL Ltd.	MOIL	INE490G01020
10	National Aluminium Co. Ltd.	NATIONALUM	INE139A01034
11	Ratnamani Metals & Tubes Ltd.	RATNAMANI	INE703B01027
12	Steel Authority of India Ltd.	SAIL	INE114A01011
13	Tata Steel Ltd.	TATASTEEL	INE081A01020
14	Vedanta Ltd.	VEDL	INE205A01025
15	Welspun Corp Ltd.	WELCORP	INE191B01025

1.6.8 NIFTY BANK

The largest and most liquid Indian bank stocks make up the NIFTY Bank Index. It is a benchmark that reflects the capital market performance of Indian banks to investors and market intermediaries. Up to 12 companies listed on the National Stock Exchange of India are included in this index (NSE). The free-floating market capitalization approach is used to determine how to create the NIFTY Bank Index. The NIFTY Bank Index can be used for a number of things, including index fund launches, ETFs, and structured products, as well as fund portfolio review.

Companies listed in NIFTY BANK

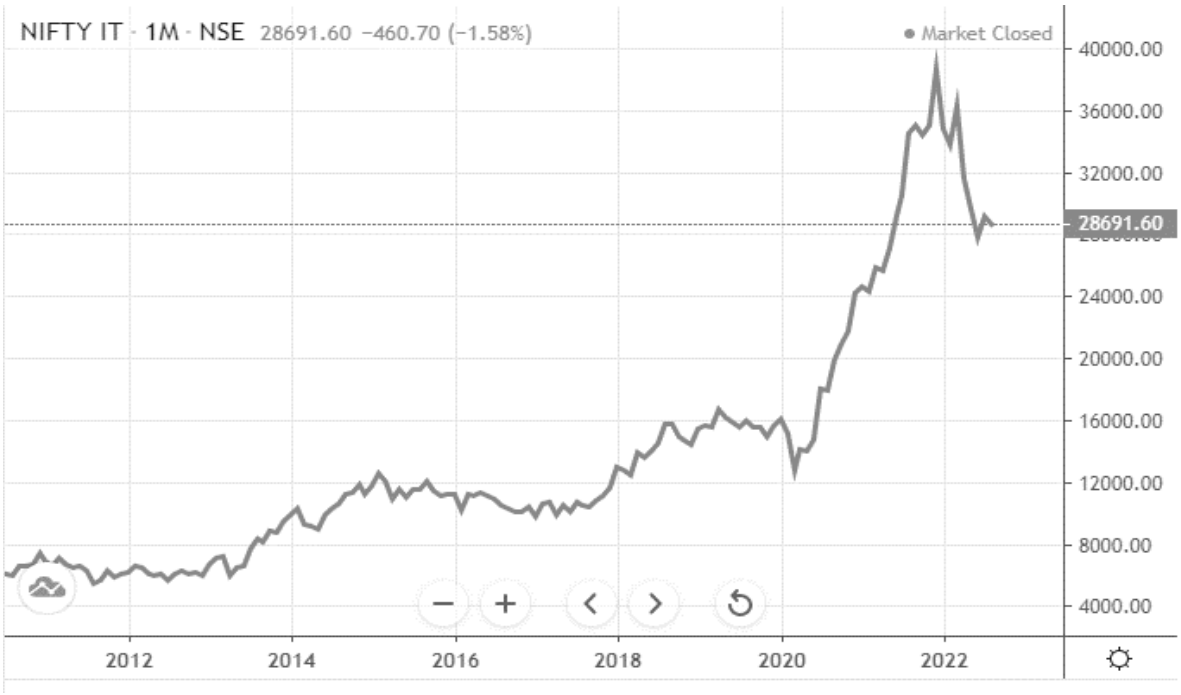
Sl.No	Company Name	NSE Code	ISIN Code
1	AU Small Finance Bank Ltd.	AUBANK	INE949L01017
2	Axis Bank Ltd.	AXISBANK	INE238A01034
3	Bandhan Bank Ltd.	BANDHANBNK	INE545U01014
4	Bank of Baroda	BANKBARODA	INE028A01039
5	Federal Bank Ltd.	FEDERALBNK	INE171A01029
6	HDFC Bank Ltd.	HDFCBANK	INE040A01034
7	ICICI Bank Ltd.	ICICIBANK	INE090A01021
8	IDFC First Bank Ltd.	IDFCFIRSTB	INE092T01019
9	IndusInd Bank Ltd.	INDUSINDBK	INE095A01012
10	Kotak Mahindra Bank Ltd.	KOTAKBANK	INE237A01028
11	Punjab National Bank	PNB	INE160A01022
12	State Bank of India	SBIN	INE062A01020

1.6.9 NIFTY IT

The NIFTY IT Index tracks the performance of IT companies in India. The NIFTY IT Index is composed of 10 companies listed on the US National Stock Exchange (NSE). The NIFTY IT Index is calculated using the free-floating market capitalization method with a base date of January 1, 1996, indexed to a base value of 1000, and the index level is a full free-flow index for all stocks in the index. Reflects floating market capitalization. given the underlying the market capitalization. Starting May 28, 2004, the index base value was changed from 1000 to 100.

Company Name	Industry	Symbol	Series	ISIN Code
Coforge Ltd.	Information Technology	COFORGE	EQ	INE591G01017
HCL Technologies Ltd.	Information Technology	HCLTECH	EQ	INE860A01027
Infosys Ltd.	Information Technology	INFY	EQ	INE009A01021
L&T Technology Services Ltd.	Information Technology	LTTS	EQ	INE010V01017
Larsen & Toubro Infotech Ltd.	Information Technology	LTI	EQ	INE214T01019
MindTree Ltd.	Information Technology	MINDTREE	EQ	INE018I01017
MphasiS Ltd.	Information Technology	MPHASIS	EQ	INE356A01018
Tata Consultancy Services Ltd.	Information Technology	TCS	EQ	INE467B01029
Tech Mahindra Ltd.	Information Technology	TECHM	EQ	INE669C01036

Wipro Ltd.	Information Technology	WIPRO	EQ	INE075A01022



1.6.10 NIFTY FINANCIAL SERVICE

The Nifty Financial Services Index is designed to reflect the behavior and performance of the Indian financial markets, including: Banks, financial institutions, mortgage companies, insurance companies and other financial services companies. Nifty Finance Index It consists of 20 stocks listed on the National Stock Exchange (NSE).

The NIFTY Financial Services Index is calculated using the float market capitalization method, with index levels of The sum of the free float market value of all stocks in the index compared to a specific underlying market capitalization. The NIFTY Financial Services Index can be used for a variety of purposes including: B. For fund portfolio benchmarking or index implementation Funds, ETFs and structured products.

Companies that listed under NIFTY FINSERV are:

Sl.No	Company Name	NSE Code	ISIN Code
1	Axis Bank Ltd.	AXISBANK	INE238A01034
2	Bajaj Finance Ltd.	BAJFINANCE	INE296A01024
3	Bajaj Finserv Ltd.	BAJAJFINSV	INE918I01018
4	Cholamandalam Investment and Finance Company Ltd.	CHOLAFIN	INE121A01024
5	HDFC Asset Management Company Ltd.	HDFCAMC	INE127D01025
6	HDFC Bank Ltd.	HDFCBANK	INE040A01034
7	HDFC Life Insurance Company Ltd.	HDFCLIFE	INE795G01014
8	Housing Development Finance Corporation Ltd.	HDFC	INE001A01036
9	ICICI Bank Ltd.	ICICIBANK	INE090A01021
10	ICICI Lombard General Insurance Company Ltd.	ICICIGI	INE765G01017
11	ICICI Prudential Life Insurance Company Ltd.	ICICIPRULI	INE726G01019
12	Indian Energy Exchange Ltd.	IEX	INE022Q01020
13	Kotak Mahindra Bank Ltd.	KOTAKBANK	INE237A01028
14	Muthoot Finance Ltd.	MUTHOOTFIN	INE414G01012
15	Power Finance Corporation Ltd.	PFC	INE134E01011
16	REC Ltd.	RECLTD	INE020B01018
17	SBI Cards and Payment Services Ltd.	SBICARD	INE018E01016
18	SBI Life Insurance Company Ltd.	SBILIFE	INE123W01016

19	Shriram Transport Finance Co. Ltd.	SRTRANSFIN	INE721A01013
20	State Bank of India	SBIN	INE062A01020

1.6.11 NIFTY MEDIA

The NIFTY Media Index is designed to track the performance of the media and entertainment industries. The NIFTY Media Index includes up to 15 publicly traded media and entertainment stocks listed on the National Stock Exchange (NSE).The NIFTY Media Index is calculated using the free-float market capitalization method, which measures the total free-float market value of all stocks in the index relative to market capitalization. There is a specific basis for this claim.The NIFTY Media Index can be used for a variety of purposes, such as evaluating fund portfolios, launching index funds, and creating ETFs and structured products.

Companies listed in Media sector

Sl. No	Company Name	NSE Code	ISIN Code
1	Dish TV India Ltd.	DISHTV	INE836F01026
2	Hathway Cable & Datacom Ltd.	HATHWAY	INE982F01036
3	Inox Leisure Ltd.	INOXLEISUR	INE312H01016
4	Nazara Technologies Ltd.	NAZARA	INE418L01021
5	Network18 Media & Investments Ltd.	NETWORK18	INE870H01013
6	PVR Ltd.	PVR	INE191H01014
7	Saregama India Ltd	SAREGAMA	INE979A01025
8	Sun TV Network Ltd.	SUNTV	INE424H01027
9	TV18 Broadcast Ltd.	TV18BRDCST	INE886H01027
10	Zee Entertainment Enterprises Ltd.	ZEEL	INE256A01028

1.6.12 NIFTY REAL ESTATE

The NIFTY land Index is meant to reflect the behavior and performance of assets companies. The index is created of 10 companies listed on the National exchange of India (NSE). The NIFTY Realty Index is calculated using the free-floating capitalization method, where the index grade reflects the overall free-floating market price of all stocks within the index relative to the capitalization of the index to particular institution's field. The NIFTY Realty Index are often used for a spread of purposes, like fund portfolio evaluation, mutual fund launches, ETFs, and structured products.

Companies listed in NIFTY REALITY:

Sl. No	Company Name	NSE Code	ISIN Code
1	Brigade Enterprises Ltd.	BRIGADE	INE791I01019
2	DLF Ltd.	DLF	INE271C01023
3	Godrej Properties Ltd.	GODREJPROP	INE484J01027
4	Indiabulls Real Estate Ltd.	IBREALEST	INE069I01010
5	Macrotech Developers Ltd.	LODHA	INE670K01029
6	Oberoi Realty Ltd.	OBEROIRLTY	INE093I01010
7	Phoenix Mills Ltd.	PHOENIXLTD	INE211B01039
8	Prestige Estates Projects Ltd.	PRESTIGE	INE811K01011
9	Sobha Ltd.	SOBHA	INE671H01015
10	Sunteck Realty Ltd.	SUNTECK	INE805D01034

1.7 ANOMALIES

In economics and finance, an anomaly occurs when the actual outcome of a given set of assumptions differs from the expected outcome predicted by a model. Anomalies provide evidence that a given assumption or model does not fit in reality. The model can be a relatively new model or an older model. There are various types of anomalies present. They can be classified into :

- Fundamental anomaly
- Technical anomaly
- Calender anomaly

Basic anomalies include:

- **Value anomalies:** Value anomalies occur due to incorrect investor forecasts. Overestimate the future profits and profits of growing companies and underestimate the future profits and profits of valuable companies

- **Low price-to-book ratio:** Stocks with low price-to-book ratios generate more returns than stocks with high book-to-value ratios.

- **High Dividend Yields:** Stocks with high dividend yields outperform the market and generate more returns. If the returns are high, the stock will generate more returns.

- **Low price/earnings ratio (P/E):** Stocks with low price/earnings ratios are likely to generate more returns and outperform the market, while stocks with high price/earnings ratios tend to underperform the index. • Ignored Stocks: Stocks that were previously ignored will later generate more returns over time. As a result, the previous best performers are underperforming the index.

Technical anomaly:

- **Moving Averages:**

An important technical analysis technique that uses long-term and short-term averages to generate signals to buy or sell stocks. This strategy buys stocks when the short-term average is above the long-term average and sells stocks when the short-term average is below the long-term average.

- **Trading Range Break**:

This technical analysis method is based on resistance and support levels. A buy signal is generated when the price hits a local maximum resistance level. This

selling pressure pushed the resistance level above the previous level as investors want to sell at the highest price. This breakout will trigger a buy signal. A sell signal is generated when the price hits the support level, which is the floor price level. Therefore, technical analysis recommends buying when price is above recent highs and selling when price is below recent lows. However, this strategy is difficult to implement.

• Small Firms Tend to Outperform

Smaller companies (that is, less capitalized companies) tend to outperform larger companies. When it comes to anomalies, the small firm effect makes sense. A company's economic growth ultimately drives its stock price performance, and smaller companies follow much longer growth trajectories than larger ones. A company like Microsoft (MSFT) may need to generate an additional $10 billion in revenue to grow 10%, while a smaller company could only generate an additional $70 million in revenue at the same growth rate. you may not need it. Therefore, small businesses are usually able to grow much faster than large companies.

• January Effect

The January effect is a fairly well-known anomaly. The idea here is that stocks that underperformed in the fourth quarter of last year tend to outperform the market in January. The reason for the January effect is very logical and hardly anomalous. An investor often sells underperforming stocks at the end of the year to try to use the losses to offset the capital gains tax (or if he has a net capital loss for the year, the IRS allows to take a small deduction). Many refer to this event as a "tax loss." This "tax sell" could push these stocks to attractive levels for buyers in his January, as selling pressure may be irrelevant to the company's actual fundamentals or valuation. Similarly, investors avoid buying underperforming stocks in the fourth quarter and wait until January to avoid being caught in a tax loss sale. The result is too much selling pressure before January and too much buying pressure after January 1st, creating this effect.

• Low Book Value

Extensive academic research shows that stocks with below-average price-to-book ratios tend to outperform the market. Many test portfolios show that buying a collection of stocks with low price-to-book ratios outperforms the market. Unfortunately, while this anomaly makes sense to some extent (abnormally cheap stocks should attract buyers' attention and return to the average value), this is a relatively weak anomaly. While it is true that lower stocks perform better as a group, individual performance is idiosyncratic and you need a very large portfolio of lower stocks to see gains.

• Neglected Stocks

So-called neglected stocks that are closer to the "small business anomaly" are also expected to outperform broad market averages. The neglected firm effect occurs in stocks that tend to be less liquid (less traded) and have minimal analyst support. The idea is that stocks will outperform when these companies are "discovered" by investors. Many investors focus on long-term buy indicators such as PER and RSI. These will let you know if the stock is oversold and if it's time to consider adding more stock. Research suggests that this exception is actually incorrect. As a result, small neglected companies tend to outperform (because they are small), while large neglected stocks don't appear to be doing as well as others might expect. However, this anomaly has a small advantage. Performance appears to correlate with size, but neglected stocks appear to have lower volatility.

• Reversals

Some evidence suggests that over a period of time (usually a year), stocks on either end of the performance spectrum tend to reverse course in the following period. Not only is this backed up by statistical evidence, but investment fundamentals also make this anomaly sensible. If a stock is a top performer in the market, its performance may be overvalued. The opposite is true for

underperforming companies. So it seems common sense to expect overvalued stocks to underperform (and restore their valuations) while undervalued stocks outperform. Reversing probably works too, in part because people expect reversing to work. If enough investors habitually sell last year's winners and buy last year's losers, stocks move in the predictable direction, becoming a sort of self-fulfilling anomaly.

• Dogs of the Dow

Dogs of the Dow are included as an example of the dangers of anomalous trading. Essentially, the idea behind this theory was that investors could outperform the market by choosing Dow Jones Industrial Average stocks that exhibit certain value attributes. Investors practiced different versions of the approach, but there were two general approaches. The first is to select the 10 Dow stocks with the highest returns. The second way is to go a step further and pick the 5 stocks with the lowest absolute prices from this list and keep them for a year. It is unclear if this approach was grounded, but some have suggested that it was a product of data mining. Even if it worked once, the effect would have been wiped out - for example, by whoever chose the first day or week before the year. To some extent, this is simply a modified version of the reversal anomaly. The Dow stocks with the highest returns are likely to underperform in relative terms and may outperform.

• Announcements and anomalies

Not all anomalies are related to time of day, month, or season. Some also announce information about stock splits, earnings, mergers and acquisitions. Stock Split Effect: A stock split increases the number of shares outstanding and decreases the value of each outstanding share. The net impact on the company's market capitalization is zero. However, before and after a company announces a stock split, stock prices typically rise. The stock price increase is known as the stock split effect. Many companies issue stock splits when their stock rises to a price too high

for the average investor. Therefore, investors often view a stock split as a signal that the company's share price will continue to rise. Empirical evidence suggests that the signals are correct.

• Short-term price drift

Following an announcement, stock prices react, often continuing to move in the same direction. For example, when a positive earnings surprise is announced, stock prices can rise quickly. Short-term price drift occurs when the stock price movement associated with an announcement continues long after the announcement. Short-term price drift occurs because the information may not be immediately reflected in the stock price.

• Merger Arbitrage

When a company announces a merger or acquisition, the value of the acquired company tends to rise and the value of the bidder tends to fall. Merger arbitrage takes advantage of potential mispricing after a merger or acquisition announcement. Acquisition offers may not accurately reflect the intrinsic value of the target company. This represents a market anomaly that the arbitrageur seeks to capitalize on. Arbitrageurs aim to use patterns where bidders typically offer a premium rate to buy the target company.

Superstitious indicators

Exceptions aside, there are some non-market signals that some believe are pinpoint the direction of the market. Below is a short list of superstitious market indicators.

- **Super Bowl Indicator:** If a team from the old American Football League wins a game, the year’s market closes low. If the traditional National Football League team wins, the market will end the year higher. As silly as it may seem, the Super Bowl Indicator was accurate more than 80% of the time in the four decades leading up to

2008. However, the indicator has one caveat. Extended team wins are not taken into account.

- **The Hemline Indicator::** The market rises and falls with skirt length.This index is sometimes called the "bare needs, bull market" theory. To his credit, the hem gauge was accurate in 1987, when designers moved from miniskirts to floor-length skirts, just before the market collapsed. A similar change was made in 1929. However, much of the controversy came first as to whether the crash or the shift in the tails came first.
- **Aspirin Index:** Stock prices and aspirin production are inversely related. The metric suggests that when the market rises, fewer people will need aspirin to cure their market-related headaches. Declining sales of aspirin should indicate that the market is on the rise.

Profit from anomalies

It is highly unlikely that anyone would consistently benefit from exploiting an anomaly. The first problem is that history needs to repeat itself. Second, even if anomalies repeat like clockwork, profits can diminish or disappear after accounting for transaction costs and taxes. Finally, all returns should be risk-adjusted to determine whether anomalous trading has caused the investor to outperform the market.

Behavioral causes of momentum and contrarian effects:

Barberis & Shehilfer (2003) classify investors based on different investment styles, Investors invest according to different styles based on past performance to determine the source of momentum Effects ending in price bubbles and herd behavior for investors investing in assets The basis for a common investment style that prevails in the market and allows for continued upswing Falling or asset prices. Wouter (2006) explains the existence of positive autocorrelation. They are continues to argue that prices will be in equilibrium in the long run, but this behavior does good Short-term autocorrelation, hence short-term momentum effect and contrarian It works well in the long run because the autocorrelation is negative in the long run.

1.7.1 TURN OF THE MONTH

Lakonishok and Smidt (1988) were the first to report month-end seasonality in inventory returns. The beginning of the month-end period is determined to be the last trading day of the month and ends with the third trading day of the following month. Specifically, the researchers found that, on average, four days at the beginning of the month explain all of the positive gains for the DJIA over the period 1897-1986. Since then, a lot of research has been done on this topic, and this paper also discusses this anomaly, but with a newer and broader data set. The trend of returns over the period of the document is significantly similar to the trend in the previous period. Interestingly, for the most recent period, it can conclude the same pattern as in the work of Lakonishok and Smidt, that almost all excess market returns are accumulated over a four-day period. end of the month and investors receive little or no reward for carrying market risk for the other 16 trading days of the month. Despite the simplicity of this anomaly-based trading strategy (e.g. buy a SPY ETF 1 day before the end of the month and sell it on the 3rd trading day of the new month at the end), this strategy both statistically profitable. meaningful. Furthermore, this anomaly cannot be explained by known asset pricing models. In short, the turn of the month is a well-known impact on stock indices, with a simple idea that stock prices typically rise over the past four days and the first three days of each month. This supports, for example, Carcano and Tornero in "Stock Index Futures Calendar Anomalies". Quoting the authors: "Our analysis shows that the month-end effect in S&P 500 futures is the only economically and statistically significant calendar effect persistent over time.

Reasons

While the change of the month is a simple anomaly, it is a major challenge for academia to explain the potential reasons for the feature. Although the effect is more pronounced in low-priced, small-cap stocks, it also exists in high-priced, large-cap stocks. The effect may persist due to profitability at the turn of the year; However, this is not the case. The effect occurs at times of the month that coincide with times of the year, but it also occurs in other months. Similarly, the monthly revenue effect is not concentrated at

the end of the calendar year quarters. Nor is the reason for the risk-based feature; The paper explored whether higher “risks” at the beginning of the month could explain this trend.

Using the standard deviation of returns as a measure of risk, it is found that the last four days of the month were no higher risky than the other 16 trading days of the month. This means that higher risk does not seem to explain the end-of-month effect. Moreover, systematic monthly changes in interest rates also do not appear to explain the monthly reversal pattern in stock returns. Interestingly, the end-of-month effect occurs in 30 different markets, so it can conclude that this effect is not due to a single factor in the structure of the US market. Ogden (1990), on the other hand, attributed the end-of-month effect to the US ``regular payday". The above is based on the fact that at the end of the month the investor receives advance payments for employment, dividends and interest. As a result, stock prices rise when investors seek to invest in these funds. Unfortunately, the paper provided tests to disprove this hypothesis. The whole problem of finding the reason for a function is also supported by McConnell and Xu's study "Early Month Equity Returns". To quote the authors, "The persistent idiosyncrasy of output remains a mystery to be answered." We believe this is due to the timing of reinvestment. The end of the month is also a natural time for both individual and professional investors to rebalance their trading portfolios/models. The above also helps make this effect statistically significant. However, care should be taken when implementing this strategy, as calendar effects tend to fade or rotate on different days of the month.

1.7.2 FESTIVAL EFFECT

Festivals and their impact on the economy of a country:

Festivals are occasions dedicated to celebration and partying. The word fest comes from the Latin word festivus, borrowed from the Anglo-Norman French. Festival was first recorded as a noun in his 1589. Prior to that, it had been used as an adjective since the 14th century and meant the celebration of religious festivals. Holidays of religious significance are called religious holidays. These festivals are celebrated in a repeating cycle in the calendar and are celebrated by the religions involved. Religious festivals are

celebrated with great interest all over the world, and these festivals are held not necessarily for entertainment, but in honor of certain cardinals such as Germany, in the name of Lord Buddha. Celebrated Buddha Purima is also celebrated on Lord Krishna's birthday as well as Krishna Ashtami. Religious festivals are marked by specific historical events such as births, deaths, conquests and defeats. Festivals affect not only the socio-cultural environment, but also the economic environment of the country. During festivals such as Diwali, Ramzan and Christmas, all devotees buy clothes, ornaments, shoes and food for the occasion. All these economic activities carried out by a large number of people on the days of the festival or on days close to the festival increase the demand for goods and services in the country and thus increase the production of goods and services. Service will be improved. . As production and sales increase, so does the company's revenue, which increases profits and profits are distributed among the various stakeholders of the company. Entrepreneurs receive a portion of profits in the form of dividends and employees receive a portion of profits in the form of bonuses. This increases the money supply and increases people's purchasing power. Government revenue in the form of taxes also increases before and after the festival. Therefore, it can be said that the festival can affect the economic environment of the country.

Selected festivals:

- Diwali effect
- Ramadan Effect
- Christmas effect

1.7.3 DIWALI EFFECT

In India, the festival of Diwali or Deepawali is celebrated as a symbol of the victory of good over evil. In Sanskrit, the word ‘Deepavali’ means ‘a string of lights’, meaning that the brightness cast darkness into people’s lives. Diwali is celebrated in the name of Goddess Lakshmi, a sign of prosperity. For different reasons in different parts of the country. In northern India, Diwali is celebrated to celebrate the return of Lord Rama with his wife Sita and his brother Lakshmana after 14 years of Vanavasa (meaning life in

the forest). When Rama and Sita come on a 'moonless night', people light oil lamps to illuminate the path of Rama and Sita in the darkness. The North Indian business community believes that the new fiscal year begins on the day of Diwali, and new business books are opened on that day. In the evening people light lamps and bake cakes. In South India, the reasons for celebrating Diwali are different. People celebrate Diwali with the capture of Naraka, an asura from Lord Krishna's consort Satyabhama.

Diwali effect on Indian economy:

Around the world, consumer sentiment and religious beliefs play an It plays an important role in the economic activity of buying and selling goods and services. In a spiritual country like India, festivals have a great impact on economic activity.Diwali, one of the most important festivals in India, influences economic activity in the country. Diwali is a busy shopping season in India and many business families in North India also start the new year on Diwali. Industries that are directly affected by the festival, such as the clothing industry, businesses that manufacture food such as jewelry and candy, and the paint industry, are also affected by the festival as many people decorate their homes with paintings. New picture for Diwali season. The cracker industry is also one of his biggest sources of income during the Diwali season in India. Angered by this, a large number of weddings are also held during Diwali in South India as this time is considered sacred.All these activities affect the economic activity of the country.

Mahurat trading at stock markets in India:

Mahurat trading is done on stock exchanges in India for one hour in the evening on the occasion of Diwali. Trading Mahurat has been observed on Bombay exchanges for several periods. The main reason for doing Mahurat trading is to welcome the new exercise with a positive sign. Investors who buy shares on Mahurat can hold them for a long time and sometimes they never even sell the shares. It is generally believed that the mahurat trade brings wealth and prosperity throughout the year. On Diwali day, in the evening, stockbrokers do "Lakshmi Puja" on stock exchanges and then they do Mahurat trading.

1.7.4 RAMADAN EFFECT

Ramadan is the ninth month of the Islamic Hijri calendar and the month in which the Quran was revealed to Prophet Muhammad. Muslims around the world consider Ramadan to be a month of fasting. This is obligatory for Muslims and one of his five pillars of Islam. During fasting, Muslims should not eat or drink anything from morning till night. Furthermore, Muslims are encouraged to abstain from any wrongdoing and to devote themselves to piety, prayer and charity. Muslims emphasize prayer, recitation of the Qur'an, and giving alms from the previous year's earnings. As a fundamental practice of the Islamic faith, Ramadan brings greater unity and cooperation among Muslim followers. Its main contribution is the greater social support given to society and the close relationship Muslims have with Allah. Beliefs play a very important role in human decisions and actions. Religious values and practices have a significant impact on economic growth. Positive psychology research shows that religion provides a valuable form of social support, inspires optimistic beliefs, and contributes to the well-being of its followers.

In Muslim countries, fasting during Ramadan means Muslims spend the first half of the day hungry, which may have had a negative impact on investor sentiment. things happen. According to religious beliefs, this is a holy month and investors often feel better trading during the month of Ramadan (. To mark the end of Ramadan, Muslims celebrate Eid-ul- We celebrate Fitr (the festival of Ramadan). Since Eid is Arabic, Feast and Eid-ul-Fitr means breakfast and symbolizes the break of Lent. Eid-ul Fitr is the last three days of Ramadan. It's time to celebrate the end of the blessed and happy month with family and friends. In addition, the prices of pre-Eid food, clothing and basic necessities also increased as people bought for the holidays. After the celebration, the price will revert to its original price. Most Muslim countries use both the Gregorian and Islamic lunar calendars. The Islamic calendar is primarily used for religious activities, while the Gregorian calendar is used for business and governmental purposes. According to the lunar calendar, the month of Ramadan is brought forward by about 10 days each year. The month of Ramadan therefore provides an opportunity to test and identify predictable patterns in returns and stock volatility relative to other months of the year. Stock exchanges are still

open on these days. The days of the month of Ramadan are observed by the majority of Muslims.

1.7.5 CHRISTMAS

It is a Christian religious festival and is celebrated all over the world. It is held on December 25 every year. This festival is celebrated in all states of India and other countries. At Christmas time, many companies. A Santa Claus rally depicts a sustained rise in the stock market that occurs from the last week of December to the first two trading days of January. There are many explanations for why Santas gather, including tax considerations, a general feeling of optimism and happiness on Wall Street, and investing in holiday bonuses. Another theory is that some very large institutional investors, some of them more sophisticated and pessimistic, tend to go on vacation at this time, leaving the market to retail investors, who people tend to be more bullish.

Causes Of Gathering Santa Claus

Several theories attempt to explain the Santa gathering, including optimism fueled by the holiday spirit, increased holiday shopping, and holiday bonus investing. Another theory is that this is the time of year when institutional investors go on vacation, leaving the market up to retail investors, who tend to be more upbeat.

The term Santa's Gathering was coined in the early 1970s by a stock analyst who noticed an upward trend in profits in the market between the first trading session after December 25 and the first two trading sessions. Of the new year. While past results can never guarantee future performance, the data seems to confirm that rallies during these time periods happen more often than not.

1.7.6 WEEKEND EFFECT

The weekend effect is a phenomenon in financial markets where stock returns on Mondays are often significantly lower than those on the Friday immediately preceding them. The weekend effect is sometimes called the Monday effect, although this

theory states that stock returns on Monday will follow the prevailing Friday trend. If the market goes up on Friday, it will continue into the whole weekend and next Monday will continue to rise, and vice versa.

Understanding the Weekend Effect

One explanation for the Weekend Effect is people's tendency to act irrationally; The trading behavior of individual investors seems to be the least contributing factor to this trend. Faced with uncertainty, people often make decisions that do not reflect their best judgment. At times, capital markets reflect the irrationality of the participants, especially when considering the high volatility of stock prices and markets; Investors' decisions can be influenced by external (and sometimes unconscious) factors. In addition, investors actively sell stocks on Mondays, especially after bad news in the market. In 1973, Frank Cross first reported the anomaly of negative Monday returns in an article titled "The Behavior of Stock Prices on Fridays and Mondays", published in the Journal of Financial Analysis.1. In that article, it shows that the average return on Fridays exceeds the average return on Mondays and there is a difference in the pattern of price changes between these days. Stock prices fall on Monday, after rising on the previous trading day (usually Friday). This timing leads to recurring low or negative Friday through Monday average returns on the stock market. Several theories trying to explain the weekend effect point to the 67endencyy of companies to release bad news on the Friday after the market closes, which then causes stock prices to fall on Monday. Others say the weekend effect could be related to short selling, which would affect stocks with high short positions. Alternatively, this effect could simply be the result of traders' optimism between Friday and Monday. The weekend effect has been a regular feature of stock trading patterns for many years. According to a study by the Federal Reserve, before 1987, there was a statistically significant negative return on weekends. However, the study mentioned that this negative return disappeared between 1987 and 1998. Since 1998, weekend volatility has increased again, and the cause of the weekend effect phenomenon remains. Is a much debated topic

1.7.7 FINANCIAL YEAR END EFFECT

There are various year end effect studies has been conducted in various countries. They will be affected by the tax exemptions etc made by investing in stocks. So, there will be a significant change in returns during the period. So, by selecting the the indian stock market, the financia year is ending on march and begins on april. Thus, an analysis is conducted for the understanding of financial year end effect specifically.

1.7.8 TURN-OF-THE-YEAR EFFECT

The year-end effect describes an upward trend in trading volume and stock price increases during the last week of December and the first two weeks of January. Since Rozeff and Kinney (1976) first noted an unusually high pattern of small-cap returns in early January, often referred to as the "year-end effect" or "January effect", Many studies have tried to determine what causes the abnormal pattern. The two most common explanations given are orchestration by institutional investors and the sale of tax losses by individual investors. The tax-loss hypothesis assumes that, before the end of the year, individual investors sell stocks tht have declined in value to realize a loss. According to the front-end hypothesis, just before the end of the year, institutional investors buy stocks with positive past returns ("winners") and sell stocks with negative past returns ("winners") loser") to present attractive year-end portfolios to their investor's client.

Anomaly detection

Anomaly detection has been extensively studied in statistics and machine learning and is also known as outlier detection, anomaly detection, or novelty detection. The development of various successful outlier detection algorithms is currently being applied to detect stock market price outliers. A direct application of outlier detection is the detection of any market manipulation. Market manipulation is the deliberate attempt to manipulate market prices in order to create an artificial, false or misleading appearance regarding the price of a security. Market manipulation is harmful because it distorts prices and impairs the functioning of stock markets. Moreover, many investors will suffer significant losses due to illegal profit taking by most manipulators. Allen and Gale (1992)

and Jarrow (1992) were the first to study manipulation. Allen and Gale categorized operations into behavior-based operations, information-based operations, and transaction-based operations. The focus here is on trade-based operations, defined by Allen and Gale as the distortion of stock market prices due to actual trade orders. Intraday data such as daily inventory or tick data is collected for this purpose. Another application is illegal insider trading detection. Anyone who has inside information before it is made public can take advantage of this. In most cases, illegal insider trading comes to light long after the news is out. It's often too late. Fraud is committed and innocent investors are put at a disadvantage. A timely response or early warning system is required. Machine learning therefore has a promising role.

2.1. REVIEW OF LITERTURE

Tong (2000) found that the Stock market anomalies found in European, Asian and North American markets.

Deepak Chawla and Munish Makkad (2000) attempted to test the weak form of efficiency in India. Serial correlation and run tests were conducted on price changes and log price changes to test the random walk hypothesis. The results indicated a tilt in favor of weak form efficiency in the Indian stock market.

In **2009 Rahman** found out regarding the partial explanation for the weekend effect. Most of the companies will release positive news at the end of the week and negative news will release on the beginning of the week. Which is highly influenced on the effectiveness of the returns.

In **2010 the study by Bodla, Chhabra and Garg** they analyzing calendar effects such as monthly effect, Monday effect, Friday effect, turn of the month effect, and semi monthly effects in Indian and US markets. Which has shown that there is semi monthly and turn of month effect in US and Indian markets by considering the data from January 1998 to December 2007.

On the 2014 a study was made by CMA. **Potharla Srikanth and Dr. Pedapalli Neeraja** it proves that there is seasonal effect on the Indian IT sector.The study has given a light that the BSE Sensex has significant role in the volatility of indian it sector.

Keppler and Xue made a conclusion to the study that there is a higher return periods from November to April than May to October.

Smirlock and Starks in 1986 find that the stock price are likely to fall on Monday. Which means closing price of Monday is less than closing price of pervious Friday.

By considering the study by **Navdeep Aggarwal Mohit Gupta in 2004.**There arise a new effect called wednesday effect. On the wednesday most of the stocks perform well and give high returns.In absence of plausible explanation by the analyst wednesday is considered by the indian investors as most optimistic day.

Nath and davli (2005) study about day of the week affect during 1999 to 2003 in Nifty. They found that there is market inefficiencies.

A study conducted by **Mangala and Sharma (2007)** revealed significantly high mean daily returns for the first half of the trading month. The study used daily closing prices of S&P CNX Nifty for a period between January 1994 through April 2005.

Agrawal & Tandon (1994) concluded that the stock prices will be increased in the last trading day of the previous month and continues in the next month for the first three days.

P.Nageswari et.al.,(2011) analyze about "day of week effect".The study gave the result are in favour of efficient market hypothesis which indicates that there is no specific week effect pattern on the indian stock market.

On the next analysis by **P.Srilath et.al.(2012)** shows detail about day of the week effect in each sectors. In banking sector, they were influenced by Monday and friday effect, in IT sector they are influenced by thursday, in FMCG sector influenced by only friday and the pharma sector is influenced by monday,wednesday and friday.

By the study of 2017 by **Akhtar, Samreen,Saghir Ahmad, Valeed, Ansari,Ahmad;** Ansari the result was shown that, there is presence of day of the week effect in the volatility index and the equity index, nifty 50.

Mahendra Raj and Damini Kumari found out that there is a negative Monday effect and positive January effects not found in India. Instead of that Monday returns are positive and Tuesday effects are negative.

In **2013, Potharla Srikanth et.al.,** made a study on the impact of weekend effects. The result shows that there is weekend effect on banking, FMCG and pharma sector but that is not true in case of IT sector.

In **2004, Kaur** has made a study on the weekly effects of stock market they collected data of BSE Sensex , S & P CNX Nifty, S & P 500 (US), NASDAQ (US) and got the result that there are positive returns are getting on wednesdays.

Umesh Kumar(2011)conducted an analysis and found out that there is a festive effect on the stock market on the preseeding and post muhurat trading.

But other than the usual weekend effect there are various other anomalies can be seen by different researchers. There are various examples such as:

Duobis and Louvel (1996) examined the French stock market as well as other markets such as US,UK, Germany, Japanese, Australia and Swiss markets. They found out that the returns are higher in Wednesdays and lower in Mondays.

In **2001 Steeley** in the research found that the weekend effects are no more after the 1990s.

Loughani and Chappel (2001) has made a study on the basis of the weekly effect. They formed a conclusion that the trading returns will be high in the time of the first trading day.

Kok Kim Lian in 2002 studied the monthly effect in Asian pacific stock markets. After the analysis he found that the turn of the month is clearly seen but the half month effect is really few and unstable in the stock markets.

Hellstrom (2002) has conducted a study by analyzing 207 stocks in Sweden. They have found that there are positive returns are getting in Tuesdays and negative effects on Fridays during the week.

Dr. Rashmita Sahoo conducted analysis for the period of January 2003 to December 2013 by the way of descriptive statistics and regression analysis by considering closing price of BSE 100. As a result, she found out there is no particular effect on the monthly effect in the BSE 100 index

Holden and Thompson (2005) studied ATX (Austria), DAX (Germany), BUX (Hungary), WIG (Poland), PIX (Czech Republic), FTSE 100 (UK), FTSE 250 (UK) and S & P 500 Share price (US). They conclude that there is no day of the week effect in the USA and there is only less evidence of Monday effect on Austria, Germany, Hungary, Czech Republic and Poland.

Managla and Mittal (2005) has analyzed the CNX Nifty junior and found the presence of the positive returns on the Wednesday effect and negative returns in the Friday effect.

Peng(2005) analyzed ASX Australia and found the presence of Tuesday effect

In 2008 **Rengasamy and Al-Macki** made a data analysis of national stock exchange the and found out that higher returns are get in Wednesdays and lower returns on Mondays and Fridays.

Liu and Li in 2010 found that negative returns on Fridays and positive returns on Mondays.

In **1983 by Donald B** analyzed that there is many higher returns will obtain during the first week of January.

I.M. Pandey (2002) in a study of Indian Stock market found existence of monthly effect but the results were still contradictory.

Patel and Evans (2003) in January 1960 to December 2001 has made a study of the seven most industrialized nations. They examined a seasonality of huge returns from December to may than the months of June to November. They are not like January effect in later studies it shows the opposite of January effect.

In the year of **2005 Yakob, Beal and Delpachitra** has examined the seasonal effects in ten Asian Pacific stock markets including India for a period from January 2000 to march 2005. In that study they state that it's the period of stability and not the period of Asian crisis. Yakob has concluded that the in the month if march and April negative returns are found out in month of the year effect. The returns of May, November and December they show a positive effect. They also find that November will create a huge positive returns and April will create negative returns. They had come to the conclusion that monthly seasonality is somewhat mixed. They can be affected by various supporting factors.

Madhusudan Karmakar and Madhumita Chakraborty (2003) evaluate the presence turn of the month effect on the Indian stock market and prove with the evidence of the turn of the month effect in the stock market.

The study of **Prakash Pinto,Shakila B, Iqbal Thonse Hawaldar in 2017** says that there is no evidence for showing the semi-monthly effect on the selected sectoral indices. But there was a significant difference in the mean returns of the first and second half of the trading month during the period of study.

In **2004**, **Lucy and Whelan** studied the semi-annual and monthly behavior of the Irish stock market. They found out that the returns for the month of November to April is higher than the returns from May to October.

Ariel in the year 1987 studied the semi-monthly and turn-of-the-month effects in the US stock market. They found evidence that there is average positive returns occurred only in the first half of the month and there are only fewer or zero returns in the second half. They also found out that there are higher returns in January and lower returns in December compared to other months. So they concluded that there is a monthly effect present in the US markets.

The study was conducted by **J. Sudarvel & Dr. R. Velmurugan** for a period of January 2002 to June 2015 in the mode of descriptive statistics and regression models in the bank index. He found out the existence of the January effect in the specific index.

Shilpa Lodha and G Soral made a study for the period May 2013 for analysis of month end effect on the BSE indices such as BSE 100, BSE 200, BSE 500, BSE Mid cap and small cap. They found out the presence of the month of the year effect in the specific indices.

Archana S, Mohammed Safar and Dr. S. Kevin made an analysis for the period of January 2008 and December 2012 in the BSE Sensex. They found the presence of the month of the year effect minimally visible in the Sensex.

There are various researchers which put forward the negative effects of the monthly effects some of the examples are:

Ercan Balaban and Meliha Bulu in 1996 analyzed the Turkish stock market for the evidence of Semi monthly effect. But they don't find any existence of a semi-monthly effect.

Wond, Mun Ho & Dollery in 2007 conducted study for analyzing the consistency of the effects over time and the effectiveness of anomalies.

Giovanis in 2010 also conducted study considering 50 indices and found the similar conclusion.

A huge study was found by **Fountas & Segredakis** in 1999 by reference to 18 markets. The result was unexpected and it shows anomalies in different months.

In the study by **El-Ansary & Hamed** in 2011 found that there are December effect in the Egyptian market while studying EGX30 index.

In **1980 Fama** has made a definition for the day of the week effect which says day of the week refers to the tendency for particular days of the week to generate significantly higher returns relatively to other days. Most anomalies relate to daily returns involve Monday and Friday which make Negative yields and positive yields respectively. This is also called weekend effect.

In **1999 Vergin and McGinnis** found that effects are highly connected with the investor's behavior. They are having high spirits while purchasing the stocks before holidays. They can make variations in anomalies.

There are other anomalies rather than the monthly effect and weekly effects. In the analysis of **Fathima and Farooq in 2001** conducted studies in various anomalies and find that there are technical and fundamental anomalies which depends on the historical data and the trading of financial instruments.

Golaka C Nath and Manoj Dalvi conducted a study from 1999 to 2003 on the day of the week effect anomaly in the Indian stock market. They found out that before the rolling settlement Monday and Fridays have higher returns compared to other days. But after the rolling settlements only Friday effect is seen in the market.

In **2004, Sarma** shows that the highest variations are shown on Mondays.

Lian and Chen (2004) started to study the weekly effects of stock market. They conducted study on the Kaula Lumpur Stock exchange Composite Index (Malaysia), Singapore Stock Exchange (Singapore), and Jakarta Composite Index (Indonesia). They found out that there exists the day of the week effect. They also found out that different trading day's returns have been found in different sub periods.

3.1 RESEARCH DESIGN

Research design is the methods and procedures that the researcher used during the research. They have greater importance during the analysis stage. Designing the findings of the study helps the researcher to plan and implement to get the required result from the research. This help to increase the chances for obtaining information that are highly related with the real situation.

The study uses mainly using various types of qualitative and quantitative research methods. From the secondary sources. For understanding the presence of stock market anomalies, the study have to find the returns, mean, standard deviations etc.

3.2 DATA COLLECTION

The data that is used for the research are Secondary data. They are taken from the National stock exchange indices like Nifty 50, Nifty 100, Nifty Auto, Nifty FMCG, Nifty Metal, Nifty Bank, Nifty IT, Nifty Pharma, Nifty Media, and Nifty Reality. Both quantitative and qualitative data analysis is used in this research. The period of the sample is taken from January 2014 to December 2021.Data that are used here is mainly taken from the genuine sources like NSE websites. These are really helpful to analyze the presence of stock market anomalies in the specific indices. The study use secondary data for the analysis from the websites of national stock exchange websites (https://www.nseindia.com/) and moneycontrol (https://www.moneycontrol.com).

Sample Size

The sample size is the number of observations in a sample.it means the number of samples that are used as a part of the research. The study is using the sectoral indices from the national stock exchange like Nifty 50, Nifty 100, Nifty Auto, Nifty FMCG, Nifty Metal, Nifty Bank, Nifty IT, Nifty Pharma, Nifty Media, and Nifty Reality.

3.3 TOOLS AND TECHNIQUES

Analytical method is used for the method of conducting the study. Descriptive analysis like mean, median, mode, correlation, SPSS etc. has been used for analyses the effectiveness of the weekend effect, turn of the month effect, turn of the year effect, end of the financial year effect and the festival effects.

- **Correlation:** it helps to understand the relationship between two variables and prove the hypothesis using p value.
- **Mean:** it is used for the calculation of the returns and compressing the data into smaller units. Weekend effect is analysed using mean.
- **SPSS:** Statistical Package for the Social Sciences is a software that are used for doing the statistical researches for analyzing quantitative researches.
- **MS Excel:** it's a software by the Microsoft for analyzing and doing the selections and sorting of data and analysis. It is mainly used during the period of study for the calculations and data analysis.

3.4 PERIOD OF STUDY

The study was conducted from 14 th July 2022 to 8th September 2022

3.5 HYPOTHESIS USED IN THE STUDY

WEEKEND EFFECT

H0: There is no weekend effect exist in the Indian stock market

H1: There is weekend effect exist in the Indian stock market

TURN OF THE YEAR EFFECT

H0: There is no Turn of the year effect exist in the Indian stock market

H1: There is Turn of the year effect exist in the Indian stock market

TURN OF THE MONTH EFFECT

H0: There is no Turn of the month effect exist in the Indian stock market

H1: There is Turn of the month effect exist in the Indian stock market

FINANCIAL YEAR END EFFECT

H0: There is no financial year end effect exist in the Indian stock market

H1: There is financial year end effect exist in the Indian stock market

CHRISTMAS EFFECT

H0: There is no Christmas effect exist in the Indian stock market

H1: There is Christmas effect exist in the Indian stock market

RAMDAN EFFECT

H0: There is no Ramdan exist in the Indian stock market

H1: There is Ramadan effect exist in the Indian stock market

DIWALI EFFECT

H0: There is no Diwali effect exist in the Indian stock market

H1: There is Diwali effect exist in the Indian stock market

3.6 LIMITATIONS OF THE STUDY

- Historical data has been used here so there can be some mistakes in the data.
- As large amount of data has been used therefore calculation errors may occur.
- The period of study is from 2014 to 2021.There arise various fluctuations in the marketing conditions according to covid – 19, demonetization etc.

4.1 WEEKEND EFFECT ANALYSIS

	Monday	Tuesday	Wednesday	Thursday	Friday
Nifty 50	-0.13835	-0.07598	-0.08157	-0.08949	-0.0257
Nifty 100	-0.1439	-0.08	-0.08599	-0.0919	-0.02699
Auto	-0.1945	-0.09282	-0.12764	-0.10694	-0.05466
FMCG	-0.14427	-0.08681	-0.08013	-0.0703	-0.06245
Metal	-0.17418	-0.10509	-0.11625	-0.0601	-0.10529
Bank	-0.15773	-0.09141	-0.01332	-0.09696	0.026239
IT	0.008354	-0.02902	-0.0341	-0.10434	-0.02493
FinServ	-0.16786	-0.03803	-0.02176	-0.05779	0.01842
Media	-0.25011	-0.10215	-0.09774	-0.1135	-0.22742
Reality	-0.22779	-0.19607	-0.07037	-0.12727	-0.07223

Table 4.1 showing weekend effect

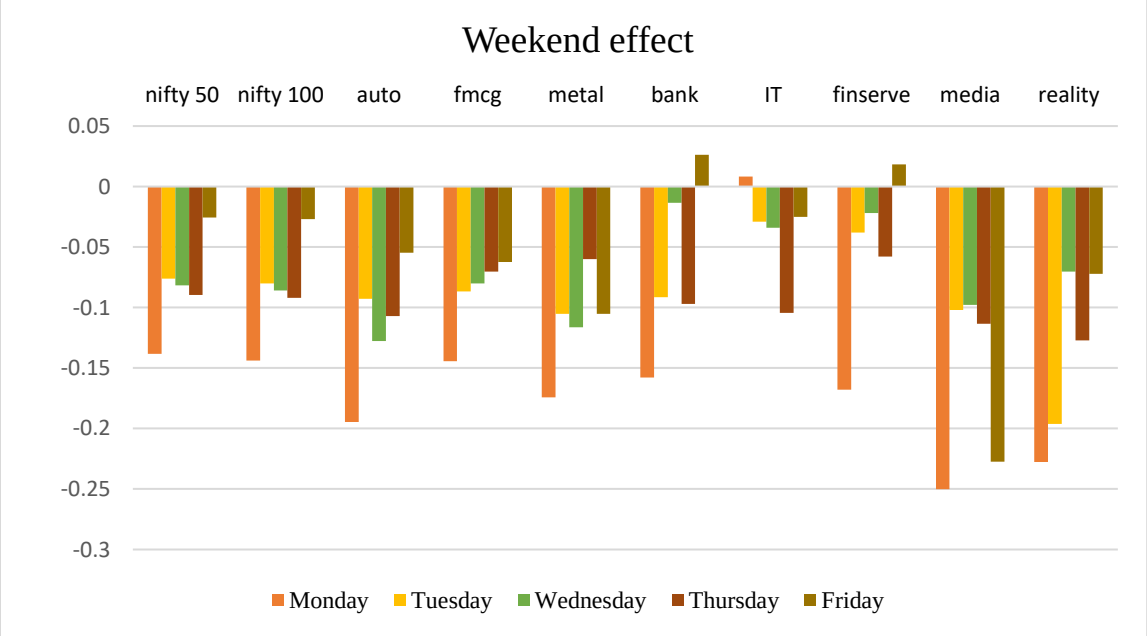


Figure 4.1 showing weekend effect

Interpretation

From the above data, it is clear that there is a weekend effect on the Indian stock indices. The major indices have the Monday effect and Friday effect. Indices like media, reality, fin serve, bank, IT, metal, FMCG, auto, nifty 50, and 100 have clear evidence of the Monday effect in the Indian stock market. Which means they have negative returns on the selected indices. Indices of the bank, IT, and FinServ prove that there are higher returns on Fridays. So, there is a significant weekend effect in the selected stock indices.

4.2 YEAR-END EFFECT ANALYSIS

	Turn of the year	Rest Of Days	P Values
Nifty 50	-0.0823	-0.07043	0.773
Nifty 100	-0.08308	-0.1233	0.987
Auto	-0.10829	-0.1756	0.058
FMCG	-0.07978	0.052196	0.231
Metal	-0.12083	0.052196	0.595
Bank	-0.06057	-0.11551	0.0358
IT	-0.03617	-0.03029	0.568
Finserve	-0.04563	-0.12715	0.548
Media	-0.15661	-0.10898	0.74
Reality	-0.15517	0.002237	0.74

Table 4.2.1 showing the year end effect sector wise

Year	Turn of the year	Rest of days
2014	0.004002	-0.15144
2015	-0.16596	-0.36431
2016	-0.08286	0.244162
2017	-0.05444	0.033558
2018	-0.11724	-0.30362
2019	-0.11755	-0.16688

Table 4.2.2 Showing the year end effect analysis of year wise data.

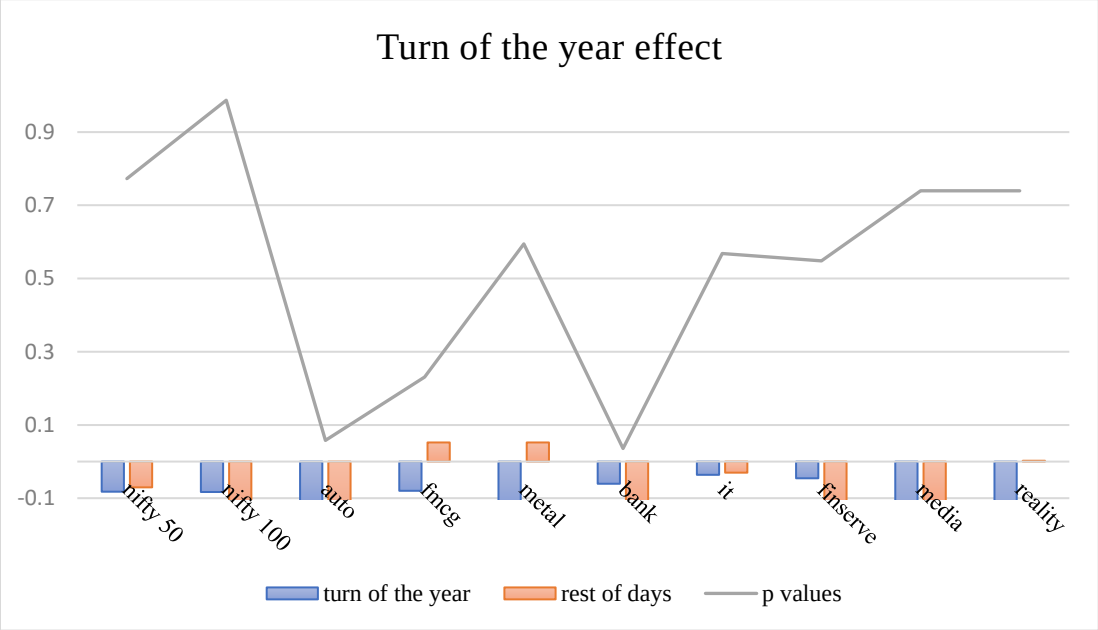


Figure 4.2 Showing the year end effect analysis of sector wise data.

Interpretation:

By analyzing the data of the turn of the year, sectors like banking and auto have a significant correlation between the turn of the year and the rest of the days. The statistical tool also proves that there is a significant correlation. When considering the year-wise data, 2014 shows evidence of a year-end effect. As a result, the null hypothesis is accepted in the case of other sectors but rejected in the case of banking and automobiles. It indicates that there is a turn of the year effect present in the auto and bank sectors and an absence in other sectors.

4.3 CHRISTMAS EFFECT ANALYSIS

Nifty Indices	Christmas Days	Rest Of Days	P Values
Nifty 50	-0.08642	0.101213	0.358
Nifty 100	-0.08922	0.101213	0.286
Auto	-0.11771	-0.04713	0.348
FMCG	-0.09284	-0.11016	0.997
Metal	-0.11604	-0.04027	0.831
Bank	-0.0689	0.001391	0.111
IT	-0.03916	0.079164	0.232
Finserve	-0.05578	-0.02857	0.191
Media	-0.16519	0.053587	0.915
Reality	-0.14941	0.101213	0.023

Table 4.3.1 Showing the Christmas effect analysis of sector wise data.

Year	Christmas days	Rest of days
2021	-0.11861	0.117716
2020	-0.12976	0.521653
2019	-0.12401	0.130543
2018	-0.11562	-0.4931
2017	-0.05115	0.234369
2016	-0.08621	-0.16941
2015	-0.16535	-0.1915
2014	0.006166	0.019056

Table 4.3.2 Showing the Christmas effect analysis of year wise data.

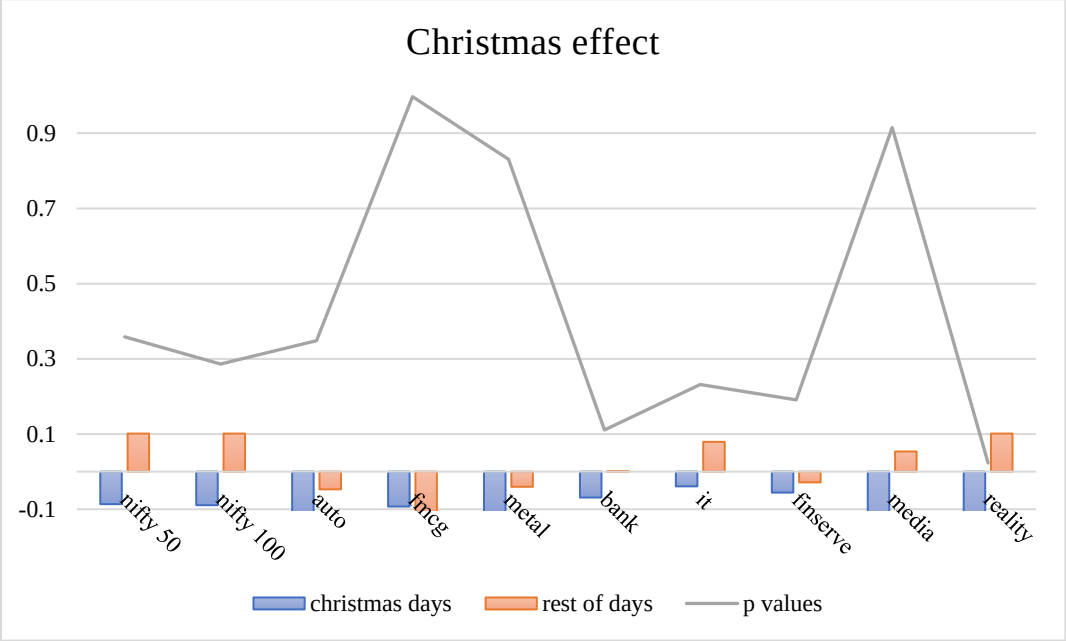


Figure 4.3 Showing the Christmas effect analysis of sector wise data.

Interpretation

The above data demonstrates the Christmas effect in the NSE indices. As a result it shows that there is a Christmas effect present in the reality sector. The statistical tool also proves the same. As a result, the null hypothesis is rejected for the reality index while, it is accepted for the other sectors. The p values are higher in FMCG, metal, and media, which signifies the negative correlation. This means, there is a correlation between the Christmas days and the rest of the days in the reality index and there is no correlation between the other indices of the NSE.

4.4 DIWALI EFFECT ANALYSIS

Nifty Indices	Diwali days	Rest Of Days	P Values
Nifty 50	-0.08242	-0.05701	0.076
Nifty 100	-0.08518	-0.04926	0.173
Auto	-0.12048	0.241763	0.849
FMCG	-0.0795	-0.11499	0.246
Metal	-0.13063	0.363816	0.877
Bank	-0.06416	-0.00863	0.273
IT	-0.03299	-0.20882	0.674
Finserve	-0.05209	0.052243	0.074
Media	-0.15132	-0.24558	0.172
Reality	-0.14792	-0.11063	0.337

Table 4.4.1 Showing the Diwali effect analysis of sector wise data.

Year	Diwali days	Rest of days
2014	0.004002	-0.15144
2015	-0.16596	-0.36431
2016	-0.08286	0.244162
2017	-0.05444	0.033558
2018	-0.11724	-0.30362
2019	-0.11755	-0.16688

Table 4.4.2 Showing the Diwali effect analysis of year wise data.

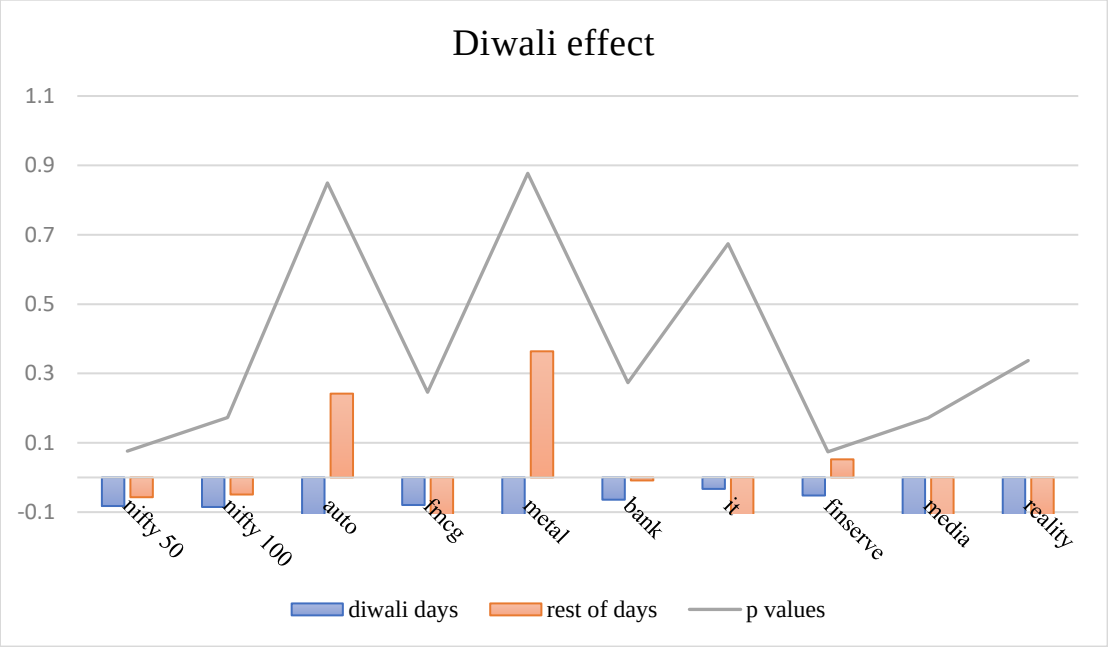


Figure 4.4 Showing the Diwali effect analysis of sector wise data.

Interpretation

The above data depicts an analysis of Diwali effect on the Indian stock market. The average returns for the year 2014, 2015, 2018, and 2019 indicate a slight Diwali effect. But, the p values are greater than or equal to the 0.05, which is the level of significance. P values are higher in the metal and auto indices, indicating a strong negative correlation between them. Thus, the null hypothesis is accepted in this situation, indicating that there is no relationship between the days of Diwali and the other days.

4.5 RAMZAN EFFECT

Nifty indices	Ramzan days	Rest Of Days	P Values
Nifty 50	-0.08382	0.001783	0.057
Nifty 100	-0.08612	-0.00862	0.107
Auto	-0.10142	0.190084	0.787
FMCG	-0.08488	0.101235	0.381
Metal	-0.08488	-0.17473	0.271
Bank	-0.06394	-0.06284	0.1
IT	-0.03942	0.050826	0.728
Finserve	-0.0477	0.017231	0.407
Media	-0.15194	-0.0915	0.395
Reality	-0.14227	-0.33817	0.939

Table 4.5.1 Showing the Ramzan effect analysis of sector wise data.

Year	Ramzan days	Rest of days
2020	-0.12768	0.709368
2019	-0.1179	-0.04438
2018	-0.10074	-0.30675
2017	-0.0386	-0.39912
2016	-0.09452	-0.09784
2015	-0.14622	0.04276
2014	0.005168	-0.12433

Table 4.5.2 Showing the Ramzan effect analysis of year wise data.

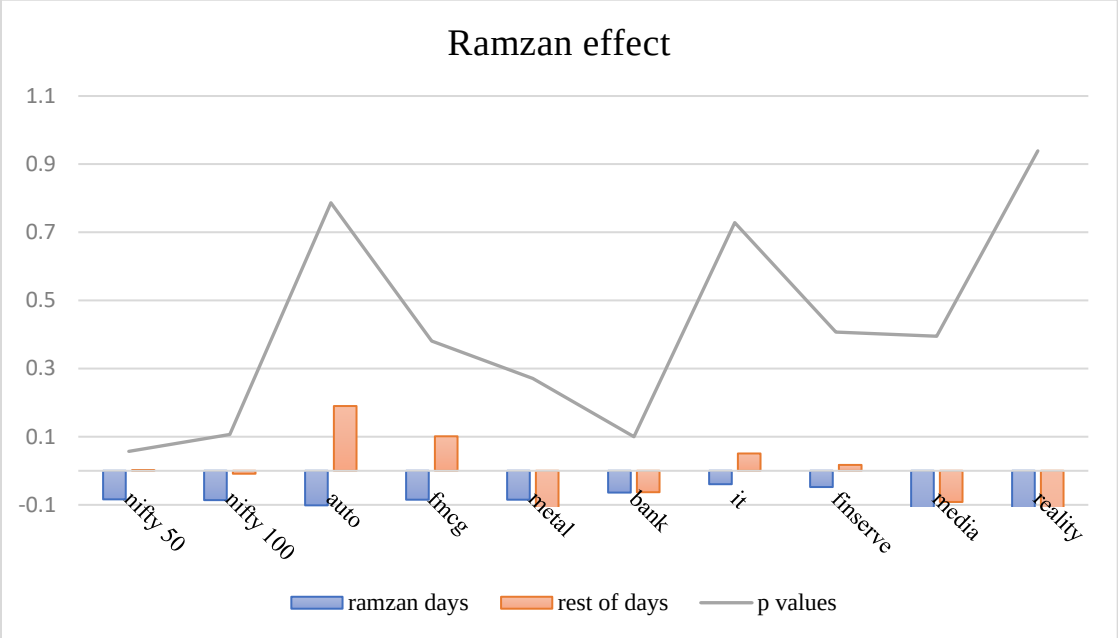


Figure 4.5 Showing the Ramzan effect analysis of Sector wise data.

Interpretation

While analyzing the Ramzan effect, a slight positive effect of Ramzan can be seen in the media, reality, banking, and metal sectors. They outperform other sectors in terms of returns. However, since there is no statistical evidence, the null hypothesis must be accepted and the alternative hypothesis should be rejected in the analysis. That is, there is no relationship between Ramzan days and the rest of the days, proving that there is no Ramzan effect in the selected stock indices.

4.6 RELATIONSHIP OF RAMZAN, DIWALI AND CHRISTMAS RETURNS

Nifty indices	Ramzan days	Diwali days	Christmas Days
Nifty 50	-0.08382	-0.08242	-0.08642
Nifty 100	-0.08612	-0.08518	-0.08922
Auto	-0.10142	-0.12048	-0.11771
FMCG	-0.08488	-0.0795	-0.09284
Metal	-0.08488	-0.13063	-0.11604
Bank	-0.06394	-0.06416	-0.0689
IT	-0.03942	-0.03299	-0.03916
Finserve	-0.0477	-0.05209	-0.05578
Media	-0.15194	-0.15132	-0.16519
Reality	-0.14227	-0.14792	-0.14941

Table 4.6 Showing the festival effect analysis of sector wise data.

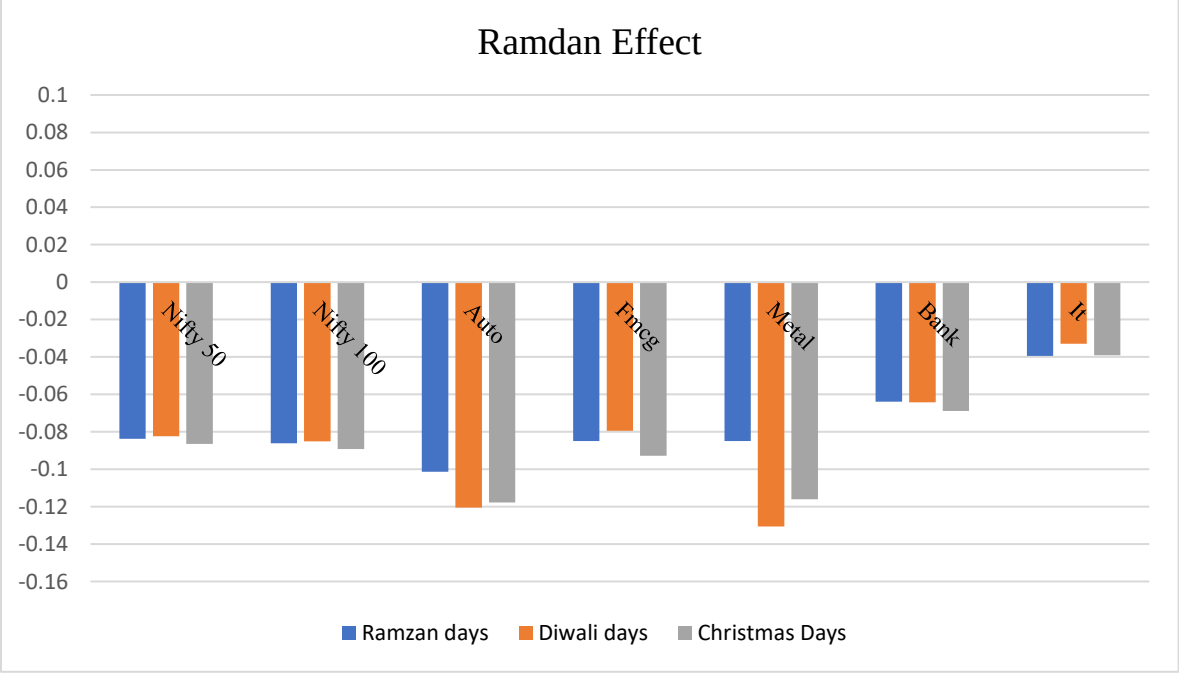


Figure 4.6 Showing the festival effect analysis of Sector wise data.

Interpretation

The above data show the comparison between the returns of three festivals in India. While doing the analysis, the three returns are almost the same as each other. Only slight differences can be seen while comparing the returns.

4.7 FINANCIAL YEAR END EFFECT ANALYSIS

Nifty Indices	Financial Year End Effect	Rest Of the Year	P Value
Nifty 50	-0.08685	0.039094	0.261
Nifty 100	-0.09081	0.071046	0.362
Auto	-0.12524	0.212182	0.607
FMCG	-0.08978	0.145086	0.131
Metal	-0.13235	0.204859	0.805
Bank	-0.05716	-0.19886	0.514
IT	-0.03153	-0.17363	0.883
Finserve	-0.05289	0.029778	0.544
Media	-0.15998	-0.00083	0.277
Reality	-0.15825	0.117433	0.687

Table 4.7.1 Showing the financial year end effect analysis of sector wise data.

Year	Financial year ending days	Rest of the days
2014	0.006251	-0.02171
2015	-0.17399	0.066714
2016	-0.07876	-0.27093
2017	-0.05215	0.036605
2018	-0.13324	0.179296
2019	-0.12324	-0.02918
2020	-0.13426	0.351519

Table 4.7.2 Showing the financial year end analysis of year wise data.

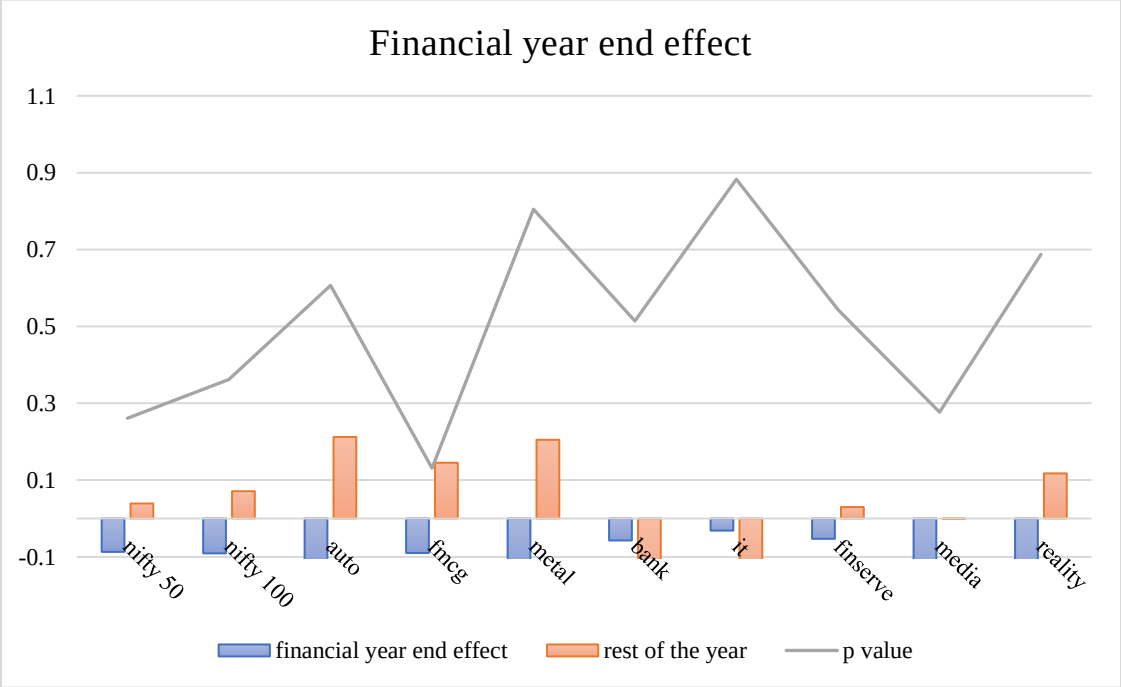


Figure 4.7 Showing the financial year end analysis of sector wise data.

Interpretation:

From the above data it is demonstrated that, march effect can be seen in the banking and IT sectors. The year wise data of 2014 and 2015 also proves the same. But, according to the statistical tool it indicates that there is no evidence of the march effect seen in these sectors. Since, the p value is greater than the significance level 0.05, the null hypothesis need to be accepted. It clearly states that, there is no significant correlation between the financial year end days and rest of days.

4.8 TURN OF THE MONTH EFFECT ANALYSIS

Nifty Indices	Turn of the month effect	Rest of the days	P value
Nifty 50	-0.08792	-0.07452	0.131
Nifty 100	-0.09728	-0.06407	0.544
Auto	-0.14206	-0.05247	0.607
FMCG	-0.10348	-0.06512	0.261
Metal	-0.17061	0.022661	0.362
Bank	-0.06023	-0.08626	0.074
IT	-0.04993	-0.00284	0.805
Finserve	-0.05001	-0.04803	0.687
Media	-0.17817	-0.11623	0.514
Reality	-0.22273	0.049107	0.883

Table 4.8.1 Showing the turn of the month effect analysis of sector wise data.

Year	Turn of the month	Rest of the month
January	-0.24223	-0.18288
February	-0.13532	-0.073
March	-0.05319	0.066027
April	-0.03659	-0.11077
May	0.049161	-0.13868
June	-0.02666	-0.04529
July	-0.13987	0.042287
August	-0.15318	-0.03635
September	-0.2409	-0.13046
October	-0.16154	-0.02386
November	-0.10735	0.017241
December	-0.14505	-0.00674

Table 4.8.2 Showing the turn of the month effect analysis of year wise data.

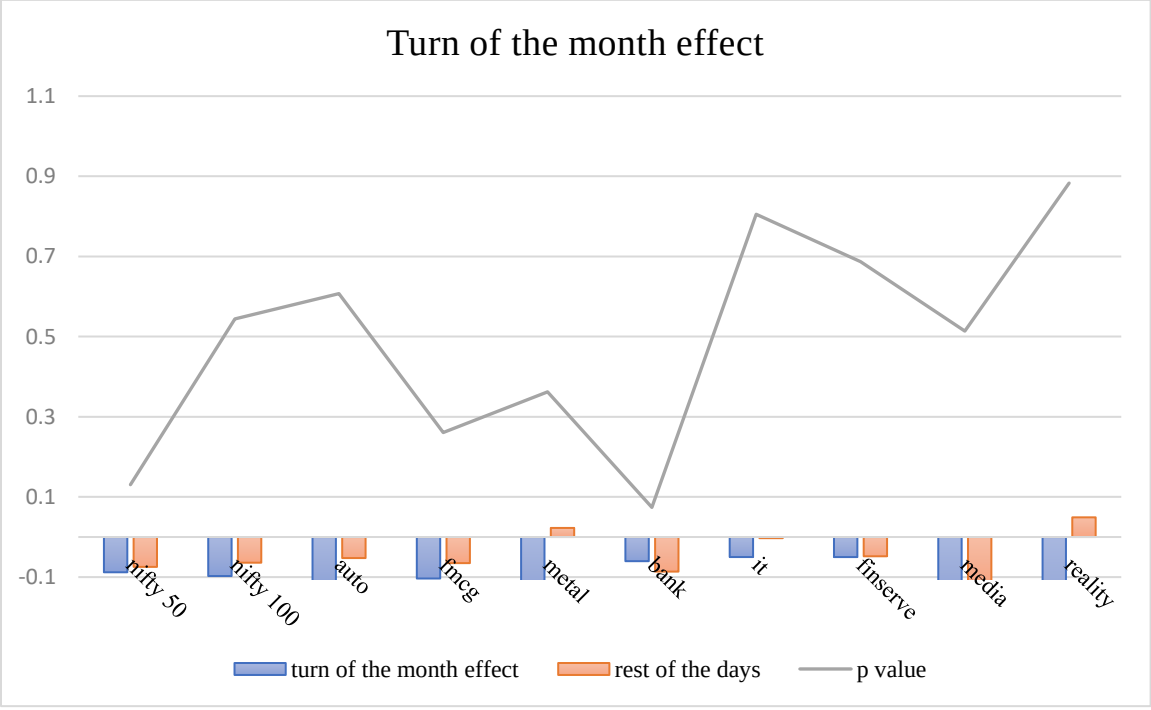


Figure 4.8 Showing the turn of the month effect analysis of sector wise data.

Interpretation

The graph above depicts an analysis of the turn of the month effect based on the average of the previous month's last and first days. When looking at the months, there is a slight turn of the month effect in April, May, and June. However, no other evidence of the end of the month can be found in the data. The p values are not less than 0.05, which is considered significant. As a result, the null hypothesis is accepted in this case. The selected indices have no turn-of-the-month effect.

5.1 FINDINGS

The main findings that are formed as a part of the result has been depicted in this chapter:

- **Weekend effects:** There is clear-cut evidence of the weekend anomaly being present in the selected sectors. There is the presence of low returns on Monday and higher returns on Friday. Because of this, there are breaks in between, and strange things can happen on global markets.

- Weekend effects are seen in the daily returns. The fear in the minds of investors is the main reason for the weekend effect. Major bad news in the stock market will be released on Monday, and good news on Fridays will also have significant importance.

- **Turn of the year effect:** While comparing all the sectors, there is no evidence that the turn of the year effect is present, except in the case of the banking and auto sector. As people's assumptions change, the turn of the year effect is denied. This is because anomalies depend a lot on how people think and feel.

- **Festival Effects:** While considering the three festivals such as Christmas, Ramzan, and Diwali, a major portion of these sectors deny the festival effects. It is for this reason that minor communities and beliefs may not affect the whole stock market.

- **Financial year end effect:** The study denies the effectiveness of the financial year end effects. It has no effect on the stock markets for the chosen time period on the chosen indices.

- **Turn of the month effect:** While considering the evidence of the data, there is no visible proof for the turn of the month effect. But while considering the month-wise data, April, May and June slightly show the turn of the month effect. The perception of people towards the turn of the month changes.

- Market anomalies are highly dependent on the psychological factors of investors. They cannot be proved or expressed using the figures.

- From this study, a major portion of the anomalies that were presented in the earlier times are not present in the selected period of study and the sectors.

- From 2014 to 2021, the Indian stock market has a number of problems, such as demonetization and the spread of COVID-19. This could have an effect on anomaly efficiency.

- Investors cannot blindly depend on anomalies because there are psychological factors that are highly dependent on the buying behavior of investors.

Indices	Year End Effect	Turn Of the Month	Financial Year End	Weekend	Christmas	Ramzan	Diwali
Nifty 50				✓			
Nifty 100				✓			
Auto	✓			✓			
FMCG				✓			
Bank	✓			✓			
IT				✓			
Finserve				✓			
Media				✓			
Reality				✓	✓		

5.2 SUGGESTIONS

The suggestions made by the study can be summarised below:

- Stock market anomalies are those that occur because of the psychological and emotional factors of investors. It will be effective only in efficient market situations.

- Investors who need to invest in intraday trading should do so on Fridays. because the returns are higher on Fridays.

- The December effect can be seen in the reality sector. So, it is good to buy real estate stocks on the adjacent days of Christmas.

- The evidence of the turn of the month effect, festival effects, and financial year-ending effects cannot be seen visibly in the NSE indices. Thus, investors don't need to consider these effects.

- Other than anomalies, investors need to consider methods like, technical charts, fundamental analysis of a company, analyzing changes in global markets, etc. for evaluation and investment.

5.3 CONCLUSION

The study was conducted to find the existence of anomalies in the Indian stock market by considering NIFTY indices. From this study, it is significant to show that there are only a few anomalies that give proof of their existence. According to the study, the weekend effect is the only anomaly seen across the selected indices and provides statistical evidence. There is a year-end effect that can be seen in the banking and auto sectors. All the other indices don't show any evidence of the year-end effect. While considering festival effects, the Christmas effect is proven in the real estate sector, and all other sectors show there is no relation between festive days and the rest of the days. The study also proves that the returns on the festival days are almost similar for all three festivals.

The study shows that there are only a few anomalies present in the Indian stock market, and those anomalies will be present only in efficient market situations. Otherwise, they will not show any anomalies other than the weekend effect. So, investors should use other methods, like fundamental analysis, technical analysis, change in global market , etc., to figure out which stocks to buy.