ANALYSIS INTO INVESTORS' PERSPECTIVE ON DERIVATIVES MARKET IN INDIA AND BANK NIFTY VOLATILITY

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Abstract

The purpose of this paper is to analyse the effect of derivative on the volatility of the stock market which should assist investors in making their investment decisions and also understand the need to regulate. The derivative market in India is a multi-million dollar market that has grown in the last two decades and have gained admiration amid the investors but it is also a high risk-high reward game. There have been efforts to increase the confidence of investors after the reforms of 1991 by making trading more user welcoming. Derivatives also provide benefits like hedging of risk and risk management from the people who are more risk opposed to people who are risk takers. It also helps to decide the asset's price level based on their demand and supply. We will also see the volatility of the stocks of Bank Nifty and take one year data pre covid-19 and post covid-19 to see if there is any difference in the investors' and traders' behaviour.

Keywords: Derivatives, Volatility, Bank Nifty, Covid-19

JEL Classification: G10, G11, G12

Introduction

The reforms of 1991 in the financial sector in the Indian economy has made a change in the stock market which included low cost trading to the participants in the market. Governments have obviously been concerned about how uncertainty affects economic performance. It has also been the subject of a lot of theoretical study. India has more than 25 million investors, making it the third biggest investor base in the world after the US and Japan. Recorded on the Indian stock exchange are more than 7500 companies. The Indian capital market is crucial in terms of level of development, amount of trading, and transparency. India has the highest market capitalisation among emerging markets. The overall market value of the Bombay Stock Exchange (BSE), which was US$ 175 billion on July 31, 1997, increased by 37.5 percent each year, reaching US$ 834 billion in January 2007. Based on the volume of daily transactions, the two largest stock exchanges, the NATIONAL STOCK EXCHANGE (NSE) and the BOMBAY STOCK EXCHANGE (BSE), were rated third and fifth in the world, respectively.

The subject of study in the field of economics on derivatives trading in the stock market has been derivatives, which are the most desirable products that enable market partakers to control risk in current securities trading. Futures contracts known as derivatives are those whose value is based on the primary assets. If stock market derivatives are created, any asset that resembles the stock market may be used as the underlying asset.

Interest rates, stock market indices, or stock prices, etc. The main justification for derivative trading is that it lowers risk by offering a different investment channel with less expensive trading fees, making it simpler for investors to prolong their settling periods through future contracts, and adding more liquidity to the stock market.

According to some studies, increased uncertainty does not significantly affect economic performance, and the benefits of lowering ambiguity may be marginal compared to the expenses. Recent developments and research results increasingly imply that news concerning fundamentals is not the only aspect influencing the stock market. Investor emotion, often known as fashions and trends, is thought to affect stock prices for both theoretic and practical reasons. By "investor sentiment," we mean opinions certain investors hold that are illogical. These investors are also known as noise traders. These illogical assumptions must be shared by noisy traders in order for them to have an impact on prices; otherwise, trades made on the basis of false assumptions would be cancelled out. Security prices depart from intrinsic values when sufficient investors' demand is predisposed by investor emotion. As the investing timeframe lengthens, price swings tend to lessen. The applicable discount factor may be decreased as the time frame lengthens, which would lessen the impact of the expectations feedback. Even if participants' behaviour is unchanged by the investing horizon, this would reduce price volatility. Longer time horizons often experience less price volatility, supporting the idea that longer time horizons tend to stabilise asset price dynamics. Large booms and crashes, in particular, only arise over the shortest investment horizon. The stocks with more unstable initial price histories typically see significantly bigger fluctuations.

Derivatives

Derivatives are among the most complicated financial instruments. The verb "to derive" is where the word "derivative" originates. It conveys the idea that it is worthless on its own. A derivative is a contract whose value is based on the value of an primary asset, like an index of the stock market, a share, an interest rate, a commodity, or a currency. A derivative contract's identification label is called the underlying. The derivative's value fluctuates together with the underlying price. Derivatives are useless if there is no underlying asset. For instance, the value of the core asset, which is gold, determines the cost of a gold futures contract. The price of the principal asset, in this case gold, in the derivative markets is determined by the spot or cash market.

Derivatives are similar to insurance in many ways. You are shielded from certain hazards like fire, flooding, and theft through insurance. On the other side, derivatives offer protection against market risks like the volatility of interest rates, commodities, and stock prices. Derivatives offer a reliable technique for insurance against various hazards in the financial world. They offer a range of risk redistribution strategies that may be utilised with any product, including debt securities, live cattle, cotton, and coffee.

In this era of globalisation, the globe is a riskier place, and vulnerability is growing. Risk cannot be avoided or disregarded. Contrarily, man is a risk-averse animal. People's aversion to risk has led to a rise in the use of derivatives. Derivatives are advantageous to risk-averse individuals since they offer a means of risk hedging. The bulk of investors and debtors from significant institutions currently use derivatives. The same is true for the numerous middlemen involved in derivatives trading. The availability of financial goods has increased thanks to derivatives, which have also helped advance more accurate techniques for analysing, assessing, and controlling financial risk. Contracts using derivatives are employed to shield both assets and liabilities from price volatility. The use of derivatives does not eradicate risk. By doing so, they transfer risks from risk-averse investors to risk-neutral investors. The derivatives market, which comprises forwards, futures, and options, was created as a result of risk-averse economic mediators' need to shield themselves from uncertainties brought on by changes in asset prices. By their very nature, financial markets exhibit a significant unit of volatility. The usage of derivative goods allows for the partial or complete transfer of pricing risks. Derivative products lessen the influence of asset price volatility on the effectiveness and money flow of risk-averse investors by securing in asset prices.

There are various derivative products traded. They are;

1. Forwards

2. Futures

3. Options

4. Swaps

A FORWARD CONTRACT is an agreement between the buyer and seller to provide an item of a certain quality and quantity, typically a commodity, at a future date.

A binding contract between a buyer and a seller for a future date is known as a "FUTURE CONTRACT." Depending on the market, the contract price will change, but it will be set at the time the trade is executed.

OPTION CONTRACT: The ability, but not the obligation, to buy (call option) or sell (put option) a particular underlying asset or instrument in one direction or the other at a particular price (the strike or exercised price) until or on a particular date in the future (the expiry date).

CALL OPTION: The holder may be entitled to purchase the underlying asset at the specified price and by the specified date.

On the other hand, a PULL OPTION gives the holder the right to sell the underlying asset by a specific date at a specific price.

SWAPS: Contracts that call for the exchange of a series of cash flows between the parties on dates called payment or settlement dates. They resemble collections of forward contracts. A SWAP is an arrangement for two parties to exchange payments based on a national principle amount.

Objectives

- Understand the concept of derivatives
- Have a look on responses from 100 individuals on derivatives and trading
- Analyse the volatility of the stocks in Bank Nifty pre Covid-19 and post Coivd-19

Review of Literature

Mikhail Anufriev, Aleksei Chernulich, JanTuinstra, (Volume 193, January 2022, Pages 1948), *Journal of Economic Behavior & Organization, Asset price volatility and investment horizons: An experimental investigation*. Using a Learning to Forecast laboratory experiment, we investigate how the investment horizon affects asset price volatility. We discover that participants cooperate on self-fulfilling trend-extrapolating predictions for short investment horizons. Then, price discrepancies are reinforced and amplified, which could result in significant asset price bubbles and crashes. Such bubbles do not form over longer investment horizons, and price volatility is typically smaller.

Joshua Aisenman and Nancy Marion, 21 January 1998, Economica (1999) 66, 157–79, *Volatility and Investment: Interpreting Evidence from Developing Countries*. Even after including the usual control factors, we find a substantial negative connection between a number of volatility metrics and private investment in emerging nations. When the investment gauge is the total of private and governmental investment spending, no such association is found. In fact, there is a positive correlation between several metrics of volatility and public investment spending. These results imply that it may be simpler to identify the negative effects of volatility on investments when using disaggregated data. We offer a number of interpretations that could be applied to our findings.

Nai-Fu Chen, Richard Roll, Stephen A. Ross, (Jul., 1986), *Economic Forces and the Stock Market.* It is a popular belief that asset values are sensitive to economic news. The assumption that numerous unforeseen events affect individual asset prices, with some having a more significant impact than others, seems to be supported by daily life. Since it is consistent with investors' ability to diversify, modern financial theory has focused on pervasive, or "systematic," influences as the most likely source of investment risk. The general conclusion of theory is that an additional component of long-term return is required and acquired anytime a

particular asset is affected by systematic economic news, and that no further reward can be obtained by (needlessly) assuming diversifiable risk.

Randall Morck, Andrei Shleifer, Robert W. Vishny, (1990), *The Stock Market and Investment: Is the Market a Sideshow?* Even while the discussions about market efficiency are fascinating, they wouldn't matter if the stock market had no impact on actual economic activity. Market inefficiencies would merely shift money between shrewd investors and noise traders if the stock market were a sideshow. However, if the stock market has an impact on actual economic activity, then the emotion of investors, which impacts stock prices, may also have a knock-on effect on actual activity.

Meenakshi Malhotra, (2012), *Commodities Derivatives Market in India: The Road Traveled and Challenges Ahead.* In India, derivatives have been used as a risk management technique for more than a century. The trying times, however, are now upon us as the world economies gradually remove trade barriers to facilitate commerce in order to manage the tremendous growth in demand and the supply uncertainty in a systematic way. The history of the market for commodities derivatives is outlined in this study. Price discovery, one of the futures market's functions, has been studied from a limited quantitative analysis standpoint. With regard to trading volume in specific commodities like silver, gold, copper, guar seed, etc., India presently ranks well in the globe.

Dr. Ashish Khandelwal, (April-June, 2022), *AN ANALYSIS OF INDIAN STOCK MARKET: PRE AND POST COVID–19.* The COVID-19 irritation has caused instigative changes inside the way during which individuals each round the earth live, and horribly impacts the overall moderation. Colossal of this negative outgrowth didn't affect from the many grievances, however from as far as possible evaluated to contain the spread of the contamination. It is been seen that lockdown hindrances incited various reactions in our representation of OECD and BRICS nations there was a for the foremost part antagonistic outcome working from the expansion in lockdown limits, however we chase solid slogan for under reaction during the lockdown protestation, trailed by several of launch that's changed therefore.

Suchismita Bose, (Jan-June, 2006), *The Indian Derivatives Market Revisited*. Products using derivatives offer some significant economic advantages, such as risk management or the redistribution of risk from risk-averse investors to those who are more ready and able to take on risk. The process of establishing the price level for any asset based on supply and demand, or price discovery, is made easier with the aid of derivatives. While these functions of derivatives aid in effective capital allocation in the economy, their misuse also puts the financial sector's stability and the health of the entire economy at risk.

Snehal Bandivadekar and Saurabh Ghosh, (Winter 2003), *Derivatives and Volatility on Indian Stock Markets.* Derivative products from Indian stock markets, like futures and options, have recently evolved into significant instruments for price discovery, portfolio diversification, and risk hedging. This study examines how the introduction of index futures has impacted spot market volatility for both the S&P CNX Nifty and the BSE Sensex using the ARCH/GARCH technique. According to empirical study, the introduction of index futures resulted in a drop in spot market volatility since the impact of recent news was larger than that of uncertainty stemming from more recent news. However, additional analysis also shows that overall market volatility has declined during the period under consideration.

Ruchika Gahlot, Saroj K. Datta, Sheeba Kapil, (2010), *Eurasian Journal of Business and Economics.* Examining how derivative trading affects stock market volatility is the study's goal. The sample data include S&P CNX Nifty closing prices from April 1, 2002, to March 31, 2005, as well as closing prices for five stocks that are derivatives and five stocks that are not. The GARCH model is used in the study to depict the nature of volatility over time and the phenomena of data volatility clustering. The evidence points to a little adjustment in volatility's structure rather than a large change in S &P CNX Nifty's volatility. However, studies for 10 different equities suggest a mixed effect.

J. Randall Woolridge, Charles C. Snow, (September 1990), ***Stock*** *market reaction to strategic investment decisions.* This study looks at how the stock market responds when company strategic investment decisions are made public. It involves a wide range of strategic choices, such as the creation of joint ventures, R&D initiatives, significant capital investments, and diversification into new goods and/or markets. We examine three different hypotheses about how the stock market will respond when these choices are announced. Because the stock market rewards managers for creating plans that boost shareholder value, the Shareholder Value Maximization hypothesis predicts a favourable response to corporate investments.

Methodology

This paper includes primary data obtained from a questionnaire which includes responses from 100 people through which we can have a look into a small section of how people perceive the derivatives market in India and how they can be divided into risk-averse, risk-neutral and risk takers. The paper also includes secondary data of stocks from Bank Nifty and we can see the volatility of these stocks through charts that includes one year data of these stocks since pre Covid-19 and post Covid-19.

Research Gap

The time available to research was 3 months due to which it was not possible to have an extensive study. Stock market is so much volatile and it is difficult to forecast anything about it whether you trade through online or offline. All the aspects of the derivative market and Bank Nifty are not covered in this paper.

Investors' Perspective on Derivative Markets

The data is taken by method of primary data collection through a questionnaire with 100 respondents.

1. What is your age?

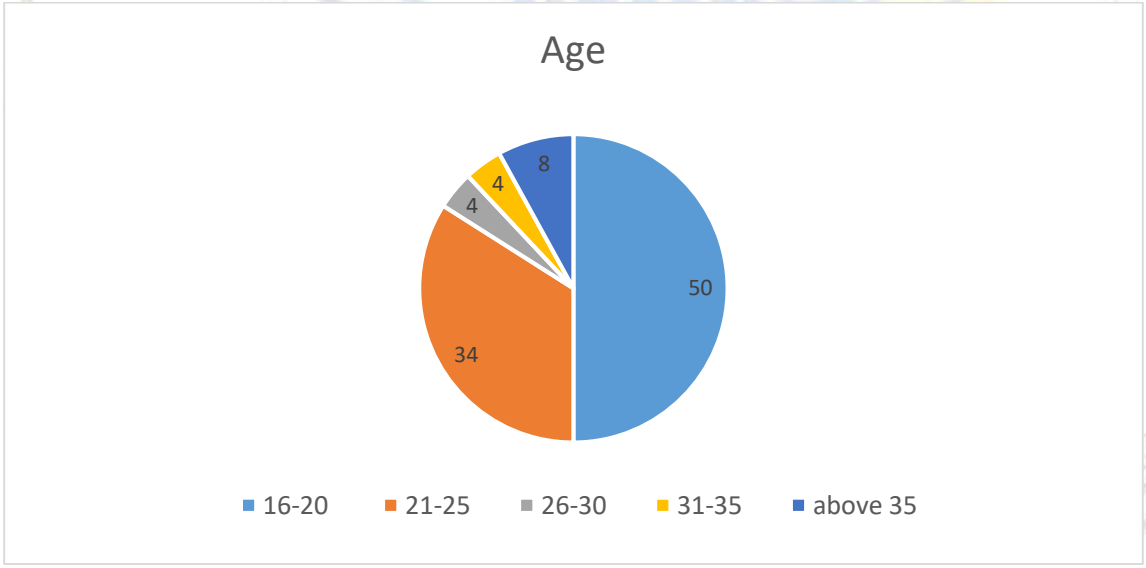

Figure 1

Out of 100 respondents, 50 are aged 16-20, 34 are aged 21-25, 4 are aged 26-30, 4 are aged 31-35 and 8 are aged above 35. This shows that most of the respondents are aged 16-20 who are very young which precisely defines the demographic of the country and they are most likely to take risks in the derivatives market.

2. Are you currently studying or working?

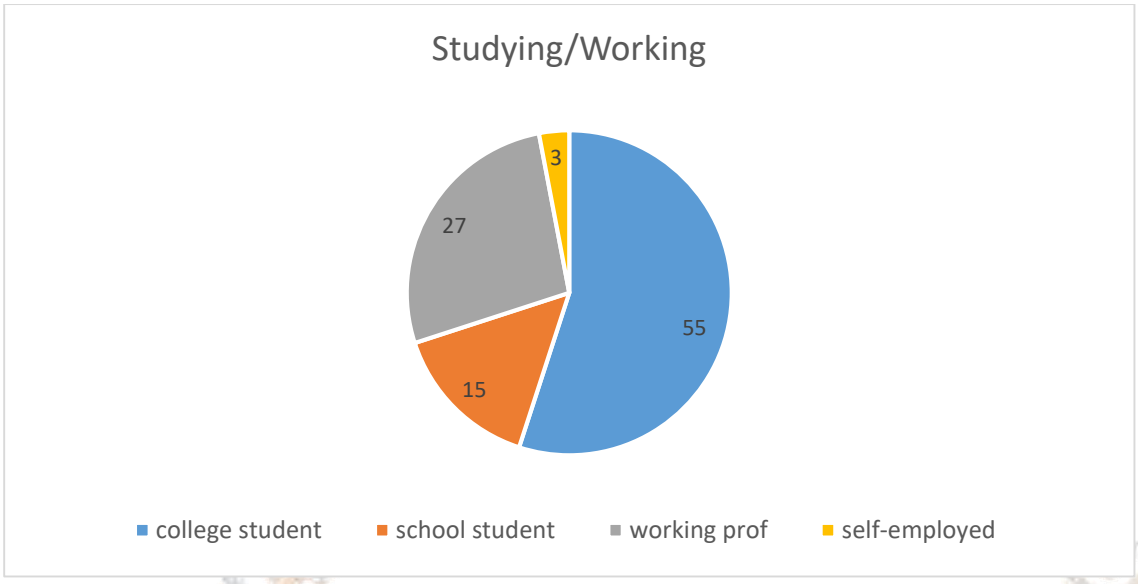

Figure 2

Out of 100 respondents, 55 are students in college, 15 are studying in school, 27 are working professionals and 3 are self-employed. Most respondents are in the category of 'studying' and young which precisely points out that they might be risk takers in the derivatives market.

3. What is your income?

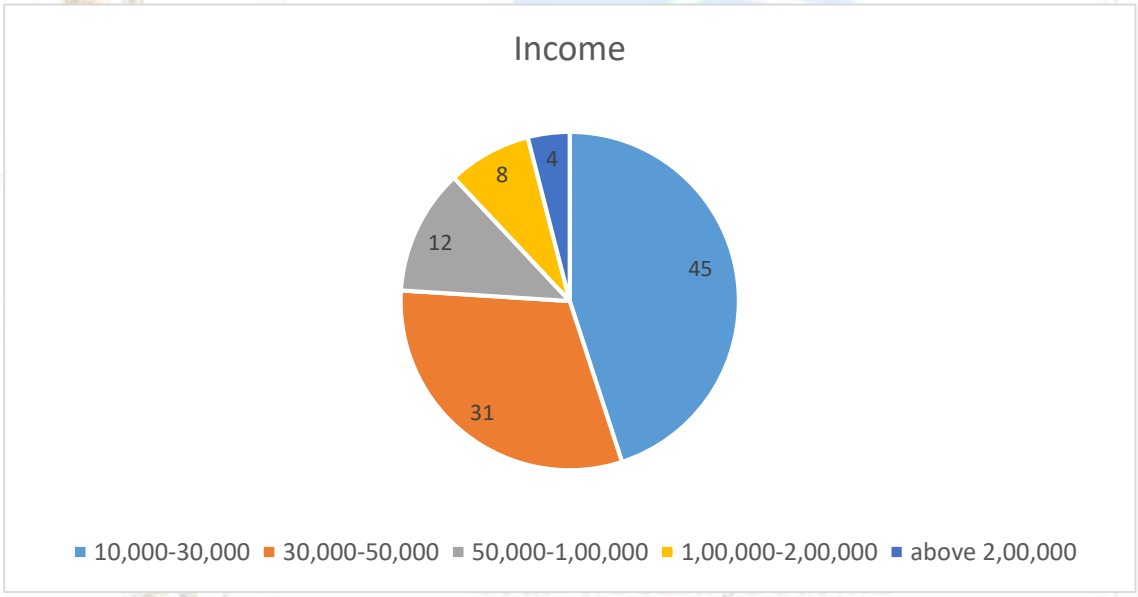

Figure 3

Out of 100 respondents, 45 are earning Rs.10,000-Rs.30,000, 31 are earning Rs.30,000-Rs.50,000, 12 are earning Rs.50,000-Rs.1,00,000, 8 are earning Rs.1,00,000-Rs.2,00,000 and 4 are earning Rs.2,00,000 and above. It shows that most respondents are earning well and are educated implying that they would most likely be risk takers.

4. What percentage of your income do you trade/invest in derivatives?

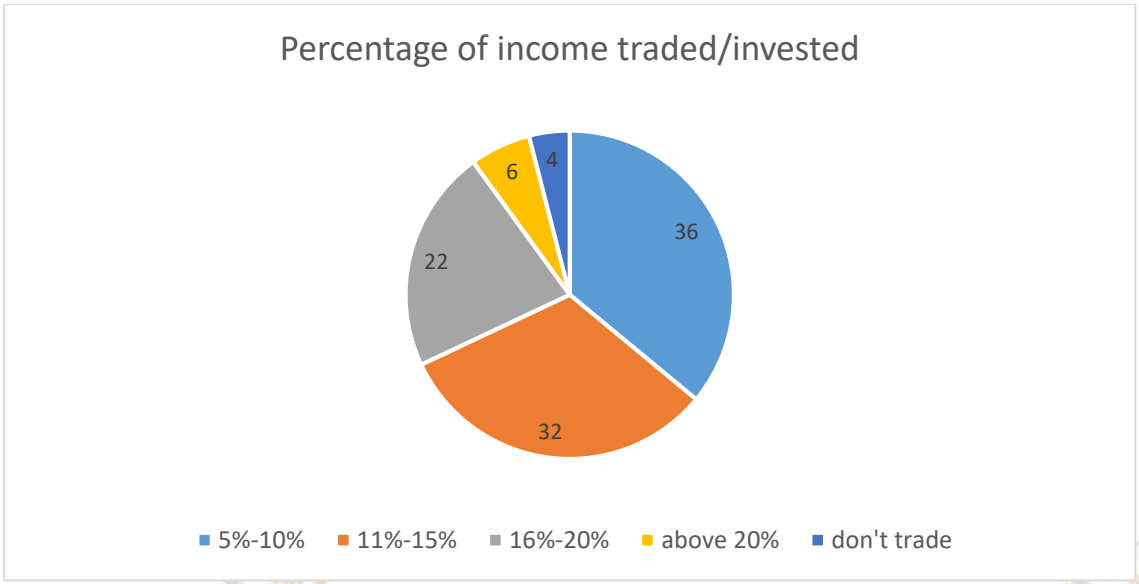

Figure 4

Out of 100 respondents, 36 people invest 5%-10% of their income in derivatives market, 32 invest 11%-15% of their income in derivatives market, 22 invest 16%-20% of their income in derivatives market, only 6 people invest above 20% in derivatives market and 4 do not trade in derivatives market. It can be seen that most of them invest or trade in derivatives market which implies that they are willing to earn profits and take risk in the derivatives market.

5. Do you have a DEMAT Account?

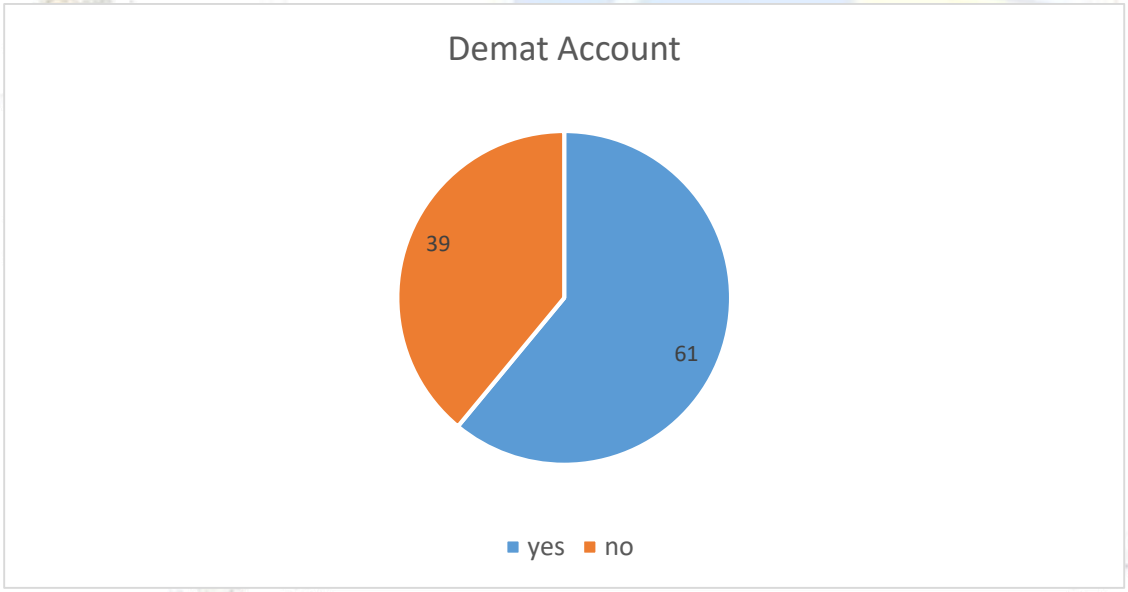

Figure 5

Out of 100 respondents, 61 of them have a Demat account while 39 of them do not have a Demat account. This tells us that 61% of the respondents are interested in trading in derivatives market which also suggests that they are aiming to earn profits along with bearing risks.

6. Which website do you prefer?

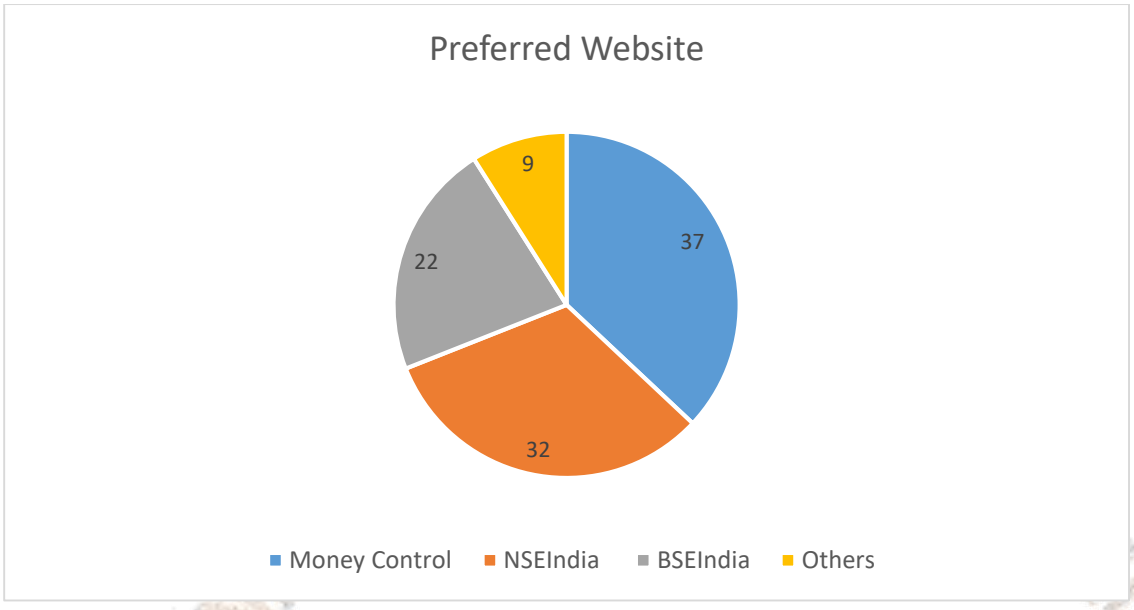

Figure 6

Out of 100 respondents, 37 prefer Money Control, 32 prefer NSE India, 22 prefer BSE India and 9 prefer websites from the 'other' category. Majority of the respondents prefer Money Control to analyse over the derivative market and this implies that they are interested in the market.

7. How long have you been investing/trading in derivative market?

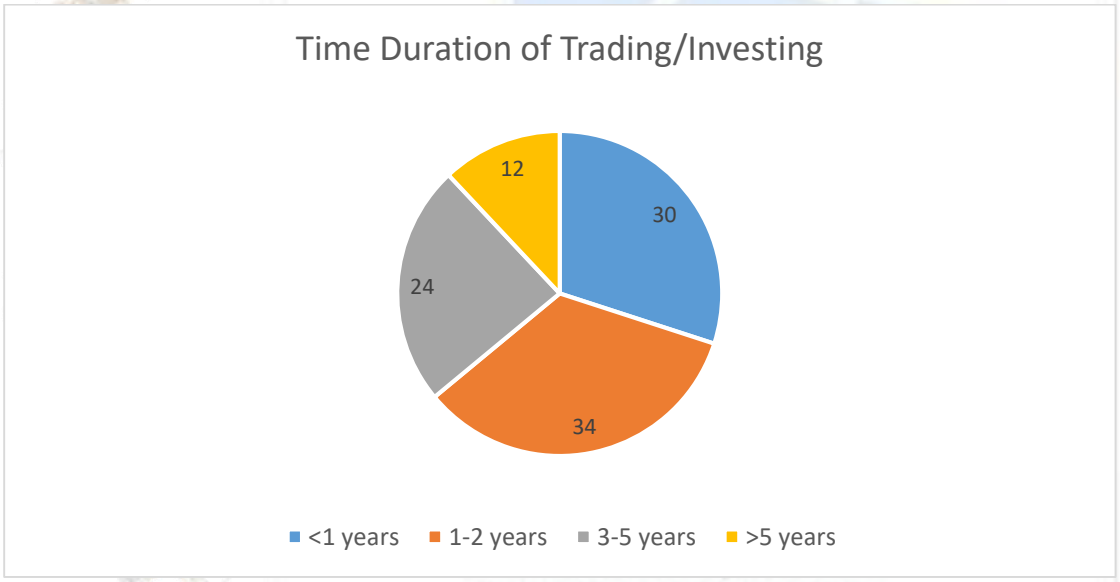

Figure 7

Out of 100 respondents, 30 are from short term trading (<1 year) in the derivative market, 34 are from medium term (1-2 years), 24 are from long term (3-5 years) and 12 are trading in the derivatives market for more than 5 years. This implies that majority of the investors are in the market from less than a year to 2 years (from short term and medium term).

8. What are the difficulties encountered by you while investing in derivatives?

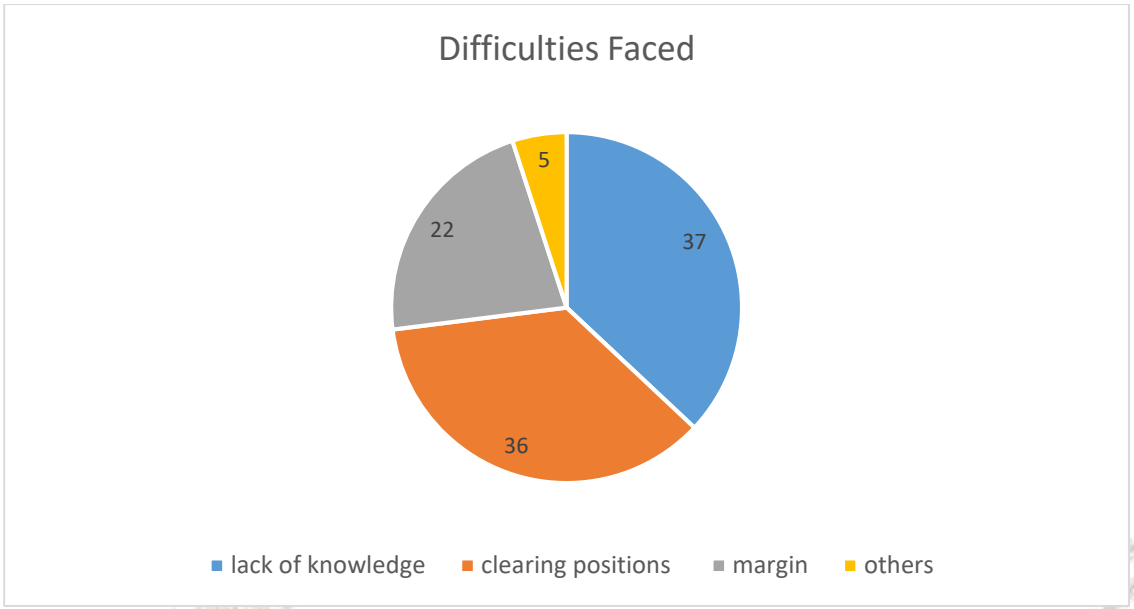

Figure 8

Out of 100 respondents, 37 have lack of knowledge, 36 of the respondents have difficulties in clearing positions (process by which financial trades settle), 22 of the respondents have a margin issue with the current performance and 5 have difficulties in the 'other' category. This shows that majority of the investors and traders have lack of knowledge which leads to unknown risk taking.

9. What is your role in the derivatives market?

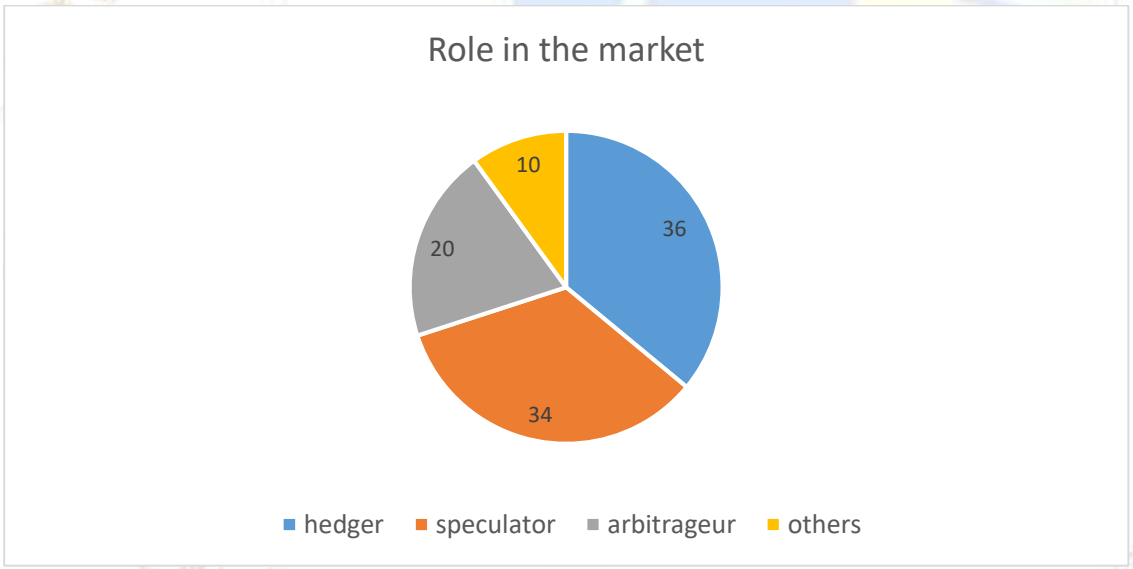

Figure 9

Out of 100 respondents, 36 are hedgers, 34 are speculators, 20 are arbitrageurs and 10 are from the category of 'others'. We can see that most respondents are hedgers and speculators meaning they have an important role in the market as they are the primary participants. But hedgers can be categorised as risk-averse while speculators (34) are risk takers or risk lovers.

10. Which of the following derivatives instruments do you deal with?

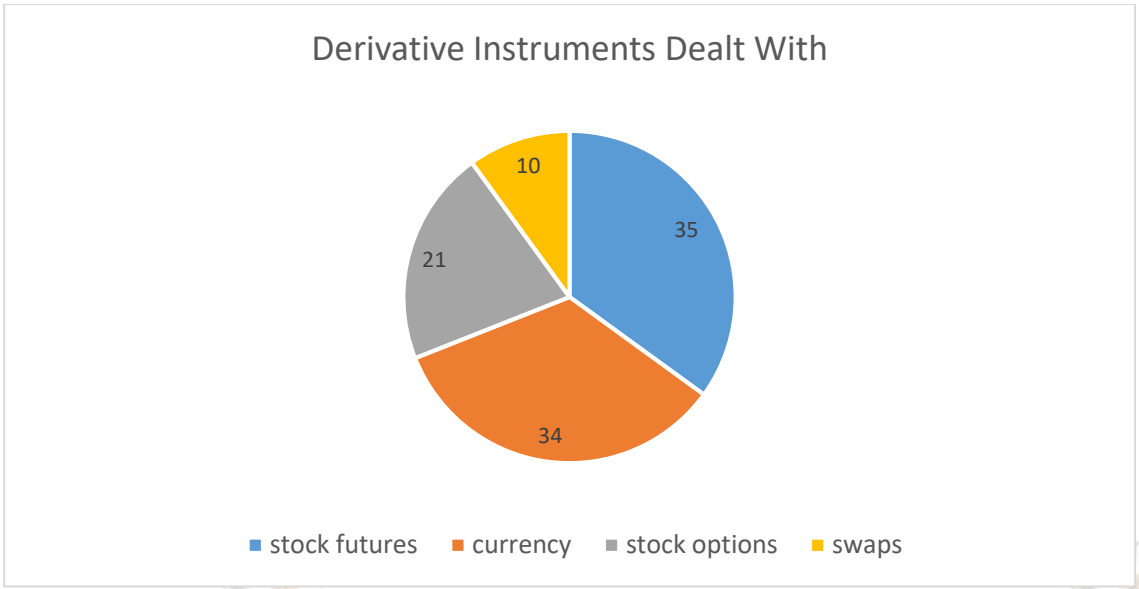

Figure 10

Out of 100 respondents, 35 of the respondents use stock futures in derivative market, 34 use currency in derivative market, 21 of the respondents use stock options in market and 10 use swaps. Majority of the respondents are using stock futures and currency as their instrument. Futures being highly liquid which is risky and currency trading being highly volatile are also risky. This suggests that most of the investors are risk takers.

Theoretical Framework

Investor Behaviour

The presumption that people make rational decisions and take into account all available information is the cornerstone of traditional economic theory. The idea of regret, also referred to as the fear of regret, is the emotional reaction people experience after realising they made an error in judgement. When considering selling a stock, investors become emotionally impacted by the price at which they purchased it. In order to save themselves the embarrassment of declaring a loss and the regret of having made a bad investment, they resolve not to sell it.

When thinking about selling a stock, investors should truly question themselves, "Would I invest in this asset again if it were to be liquidated and what would happen if I made the same purchase?" If the response is "no," it is time to sell. If not, regret over buying a losing stock and remorse over failing to sell when it became apparent that a unfortunate investment choice had been made will result, and a spiteful cycle where averting regret leads to further regret will develop. When investors learn that a commodity they had only bearing in mind purchasing has increased in value, the regret theory may also apply to them. By buying only the stocks that every other person is buying and using the justification that "everyone else is doing it," some investors prevent the possibility of experiencing this regret. Strangely enough, a lot more people don't feel as bad about incurring losses on a stock that the majority of people hold as they do about making a loss on a stock that is unknown or unpopular.

Prospect Theory and Loss-Aversion Theory

Everyone is aware that investors desire a sure return over an uncertain one; we desire compensation for taking on greater risk. That makes sense, it appears. Here's where it gets strange. Prospect theory states that people experience stronger emotions when they win than when they lose. Equal gains do not make people as happy as possible losses do. The prospect theory suggests that investors hold onto losing stocks because people usually take greater risks to avoid losses than to achieve gains. As a result, investors are content to cling onto a hazardous stock purchase in the anticipation that the price will rise. Gamblers may behave similarly during a losing run, upping their bets to try to make up for prior losses. Because of this, we frequently assign a larger

value to items we already own than we would be willing to spend for them, despite our rational desire to profit from the risks we take.

According to the loss-aversion theory, there is an additional justification for why investors can decide to retain their losers and liquidate their winners: they might think that today's losers would shortly outperform today's winners. Investors typically make the mistake of chasing market activity by buying businesses or funds that attract the most media attention. According to research, money shifts more swiftly from mutual funds with low performance to those with strong performance. In the absence of better or more recent information, investors frequently think that the market rate is the appropriate price. Giving too much weight to recent market views, opinions, and events, people frequently extrapolate recent trends that differ from historical, long-term averages and likelihood. Price pegs, or prices that are considered significant because they are close to earlier levels, frequently influence investment decisions in bull markets. The more remote returns of the past are no longer relevant in the judgments of investors because to this anchoring heuristic.

Volatility

A statistical measurement of volatility is the dispersion of returns for a certain securities or market index. It is frequently expressed as the variance or standard deviation of historical returns for a specific time period. The annualised standard deviation between the security's monthly returns over the previous year is used to calculate the volatility in this case.

Volatility is a measure of a security's value's risk or unpredictability. In general, a higher volatility signifies a larger risk due to the broader variation around the average price it implies. This indicates that the price of the security can drastically shift in either way in a brief amount of time. In contrast, a lower volatility indicates a reduced risk because it indicates that the security's price is more stable.

Causes of Volatility

1. Political and economic factors

When governments decide on trade agreements, law, and policy, they play a noteworthy role in regulating businesses and have the power to have an influence on an economy. Share prices are affected by investor emotions, which can be sparked by anything from speeches to elections.

Economic data is crucial because when the economy is doing well, investors tend to react favourably. Monthly job reports, inflation data, consumer spending information, and quarterly GDP figures can all have an impact on market performance. If these fall short of market expectations, however, markets can become more unpredictable.

2. Sector and industry factors

Volatility can be caused by specific events that happen within a sector or industry. For instance, a major weather event in a crucial area for oil production could increase oil prices. Because they stand to gain, companies engaged in oil distribution may see an increase in share value, whilst those with high oil costs may experience a loss. Like in the preceding illustration, increased government regulation in a certain industry may result in lower stock values due to higher compliance and labour expenses that may have an impact on future earnings growth.

3. Organization performance

A single company may be impacted by volatility rather than the entire market. Positive news, such as a strong earnings report or a new product that is satisfying customers, can increase investors' trust in the company. If more investors try to buy it, the higher demand could lead to a sharp increase in the share price. On the other side, when shareholders sell off their shares, a share price may be adversely affected by a product recall, data

breach, or improper management behaviour. Depending on the scale of the company, this excellent or bad performance could also have an impact on the bigger market.

The volatility that comes with long-term investing is typical.

Market volatility can be triggered by a variety of factors, including shifts in politics, the economy, company behaviour, and business practises. Although it may seem unnerving, everything is "normal."

Investors are less likely to be surprised when periods of volatility occur and are more likely to respond logically when they do when they are initially prepared for them. Investors should prepare themselves and keep their attention on their long-term investment objectives by adopting the mentality that accepts volatility as a necessary component of investing.

Since December 2019, Covid-19 has been a major source of concern for people all around the world, with both reported cases and fatalities increasing significantly. A World Bank research states that Covid-19 has infected over 10 million individuals and killed about 2 million of them. Governments should adhere to standardised regulations, according to the World Health Organization, to control the disease. Governments all round the world have put in place preventative measures like travel restrictions, social isolation, house quarantines, work-from-home policies, and business closures, among other things. The obstacles that Covid-19 has posed to people's social, economic, and financial activities are unprecedented. As a result, knowledge about these upheavals was promptly digested by international stock markets and factored into stock prices, causing a global decrease. Additionally, investor psychology increases the pressure on institutional and ordinary investors to sell, which raises volatility in the markets. It's fascinating to note that investors closely monitor Covid-19 health news, and prices react quickly to fresh information every day. Finding information and maximising market potential result from this (Vozlyublennaia 2014).

We will now look at charts that are plotted taking daily data from Bank Nifty (all 12 banks). We will see the volatility in the prices of these stocks. Depending on the volatility we will see how risky these stocks are. This data is taken from the time period 18/11/2021 to 18/11/2022 (post Covid-19). We will also analyse the possible investors' perspective while looking at the volatility of these banks.

Post Covid-19 Bank Nifty Stocks

1. Punjab National Bank (PNB.NS)

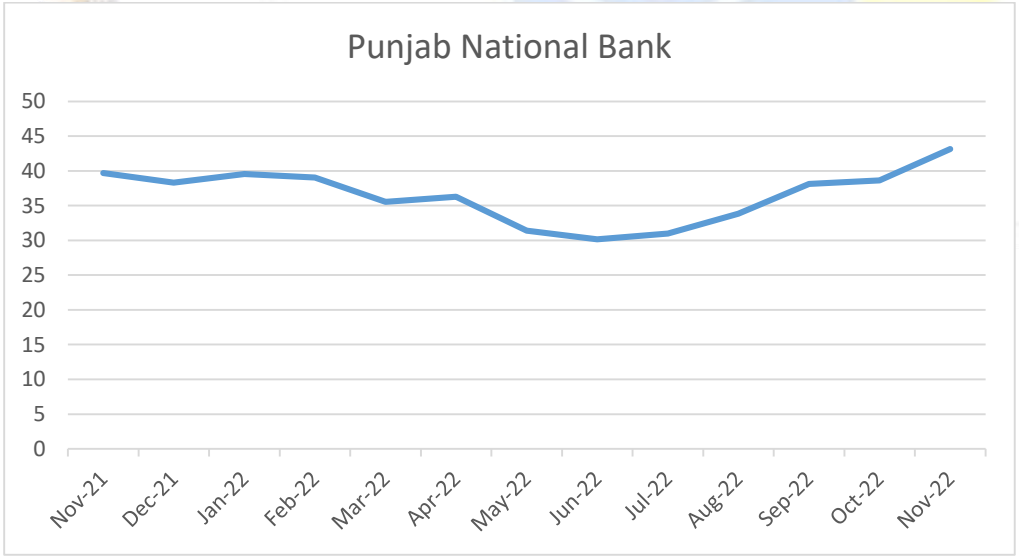

Figure 11

Looking at the above graph, we can see that the volatility of PNB is not very high which makes it more desirable for investors to invest in this stock.

2. IDFC Bank (IDFCFIRSTB.NS)

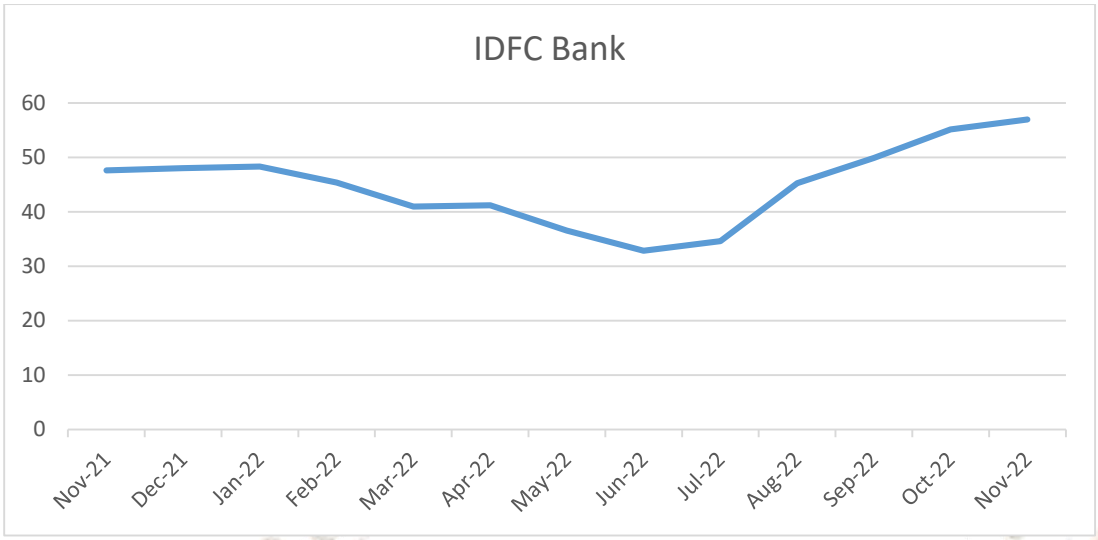

Figure 12

Looking at the above graph, we can see that the volatility of IDFC Bank is not very high except for the months of May to July which makes it more desirable for investors to invest in this stock.

3. Federal Bank (FDERALBNK.NS)

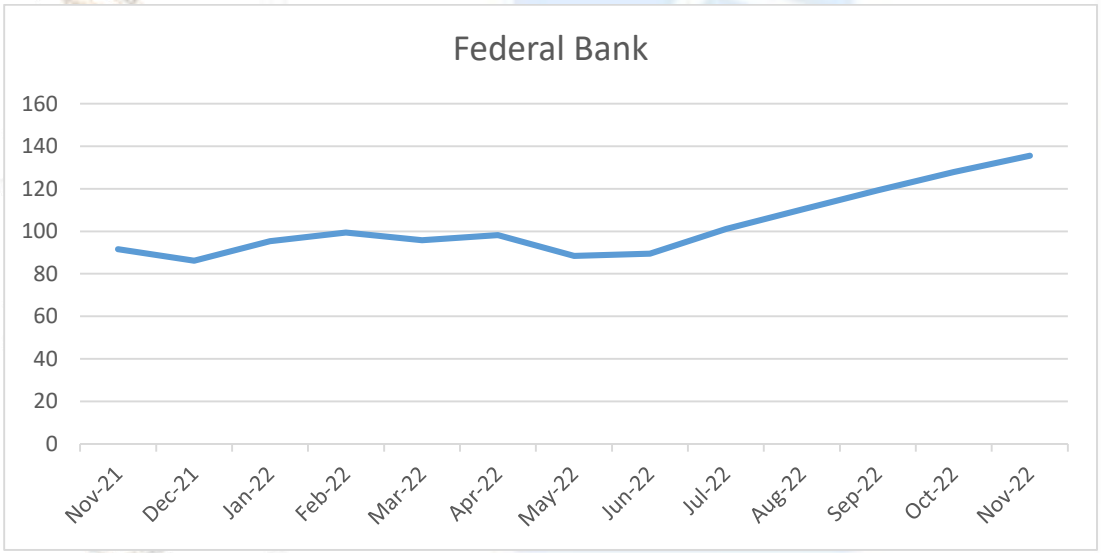

Figure 13

Looking at the above graph, we can see that the volatility of Federal Bank is very low which makes it more desirable for investors to invest in this stock. It has an upward moving trend.

4. Bank of Baroda (BANKBARODA.NS)

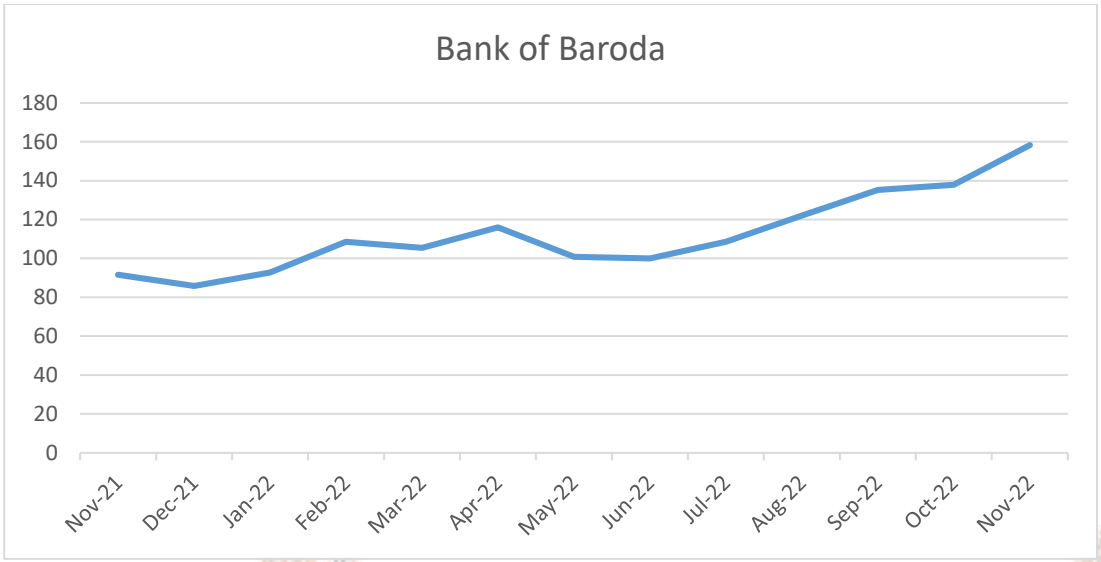

Figure 14

Bank of Baroda clearly has an upward moving trend. The volatility of this bank Is not very high and it is desirable for investors to invest in this stock.

5. Bandhan Bank (BANDHANBNK.NS)

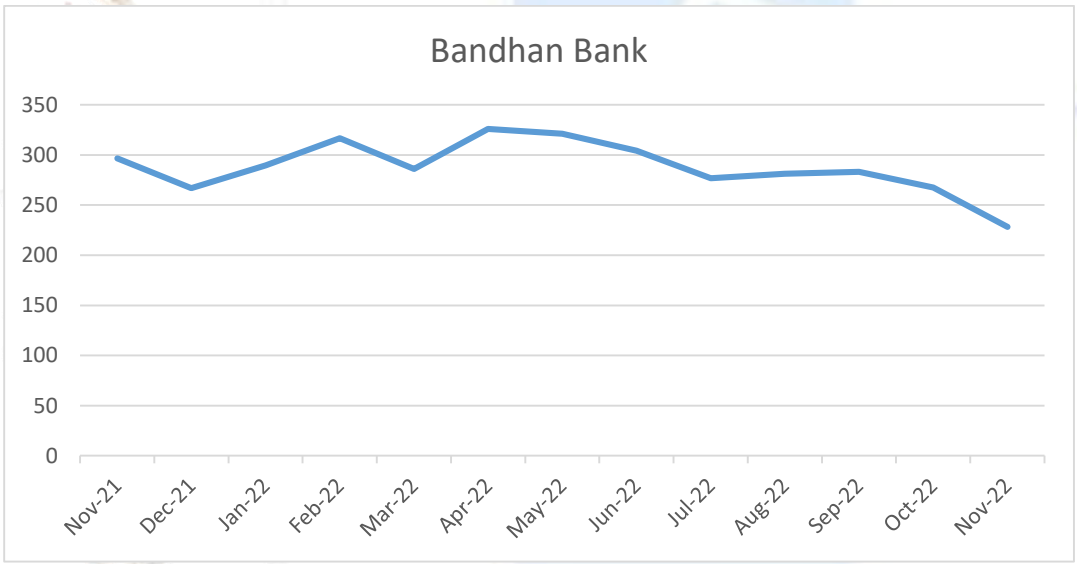

Figure 15

Bandhan Bank has a slight downward trend towards the month of November 2022. This bank is not very volatile which makes it desirable for risk-averse investors to invest in this stock.

6. State Bank of India (SBIN.NS)

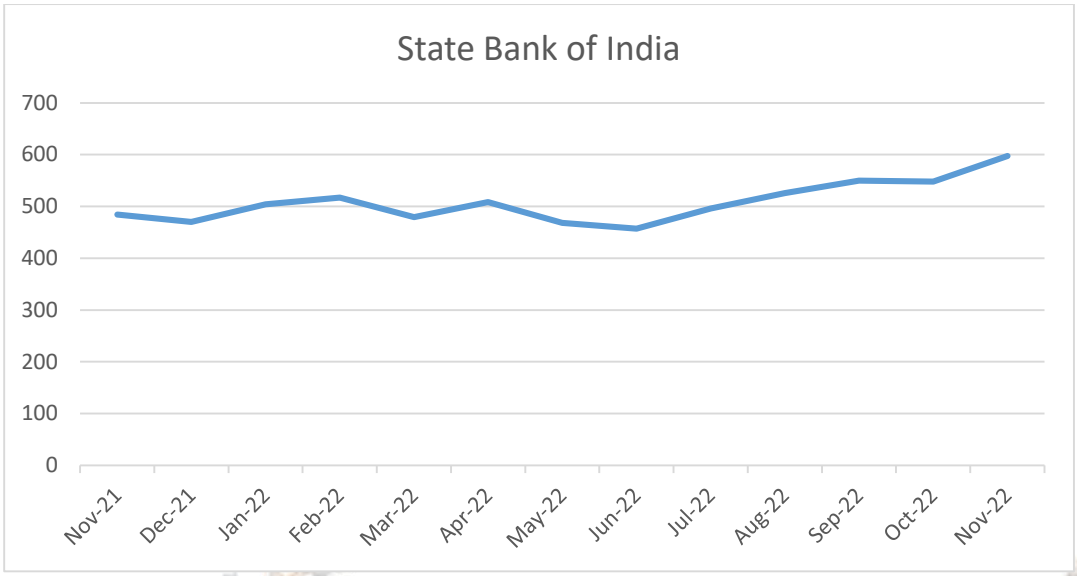

Figure 16

SBI has a slight upward trend towards the month of November 2022. This bank has very low volatility which makes it desirable for risk-averse individuals to invest in this stock.

7. AU Small Finance Bank (AUBANK.NS)

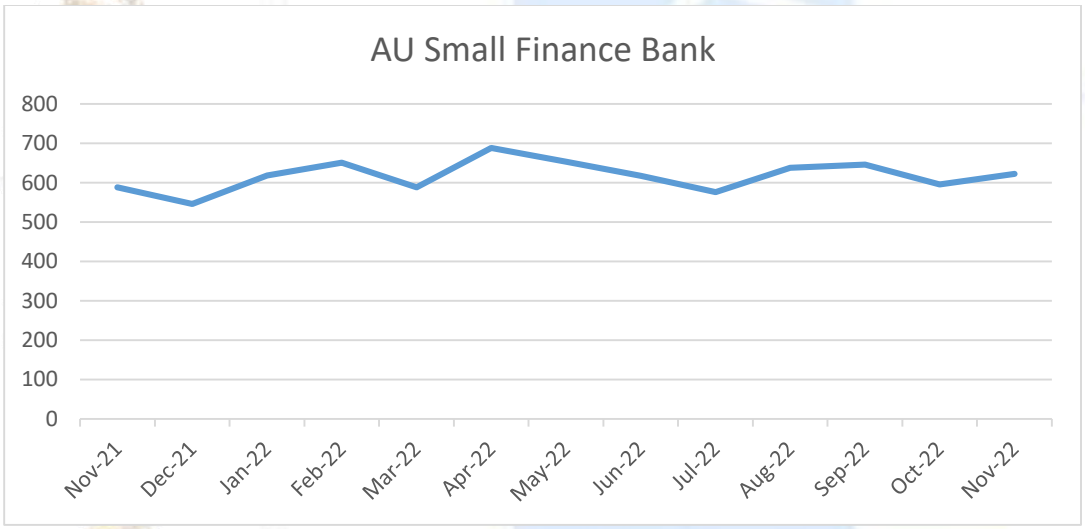

Figure 17

The volatility in AU Small Finance Bank is low which makes it desirable for risk-averse individuals to invest in this stock.

8. AXIS Bank (AXISBANK.NS)

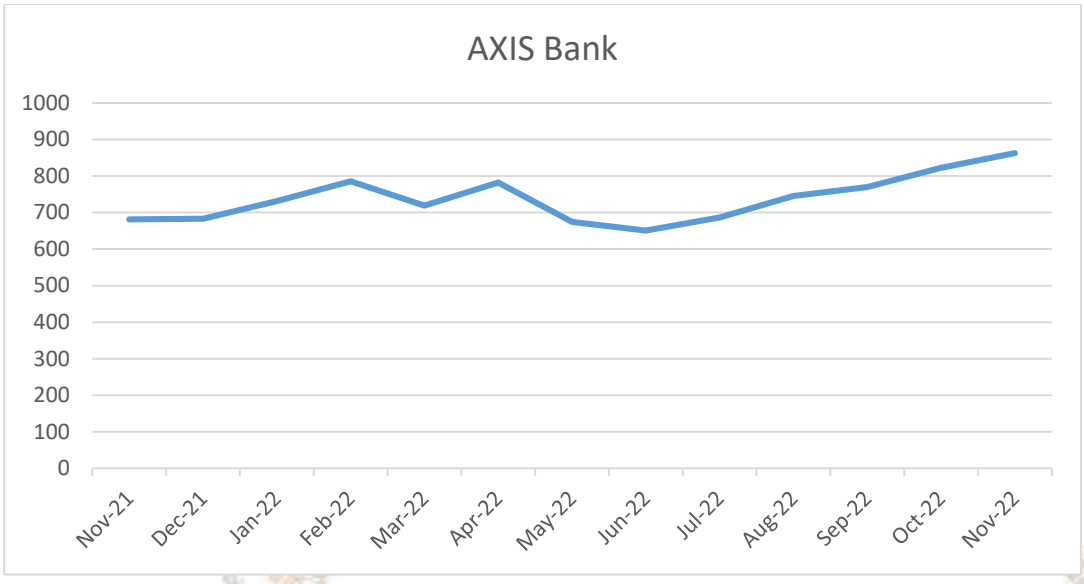

Figure 18

Axis Bank also has low volatility which makes it desirable for risk-averse individuals to invest in this stock.

9. Kotak Mahindra Bank (KOTAKBANK.NS)

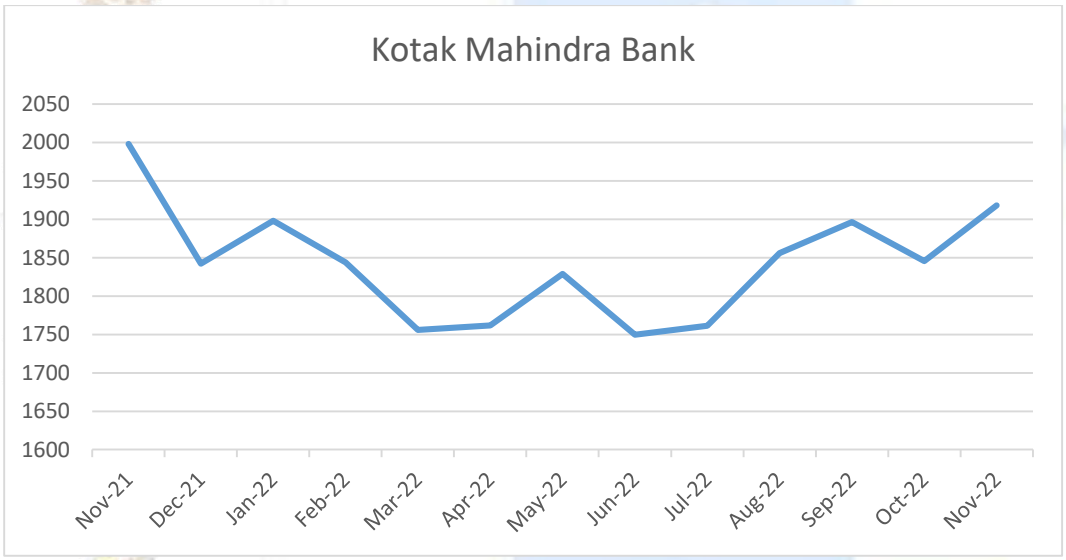

Figure 19

Kotak Mahindra Bank has very high volatility which makes it less desirable for risk-averse investors to invest in this stock but risk lovers would probably invest in this stock as higher risk can also have higher profits.

10. Indusind Bank (INDUSINDBK.NS)

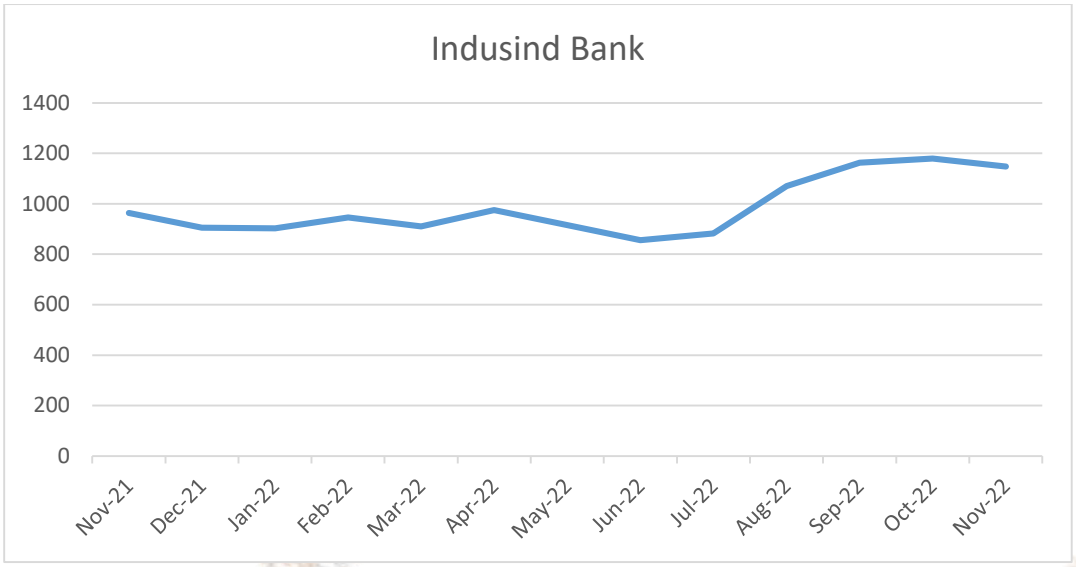

Figure 20

Indusind Bank does not have high volatility which makes it desirable for risk-averse individuals to invest in this stock.

11. ICICI Bank (ICICIBANK.NS)

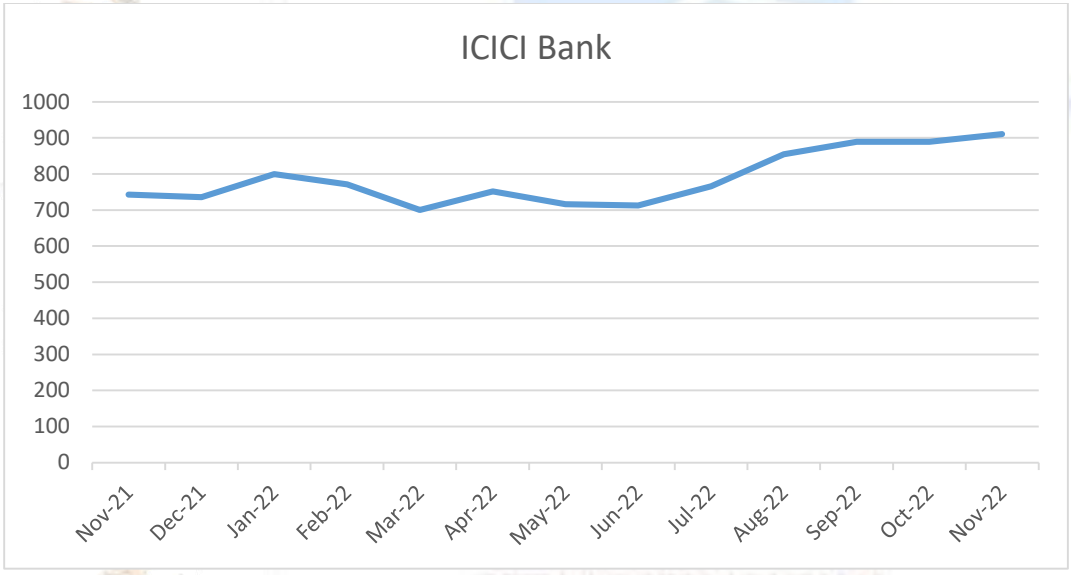

Figure 21

ICICI Bank has very low volatility which makes it desirable for risk-averse individuals to invest in this stock.

12. HDFC Bank (HDFCBANK.NS)

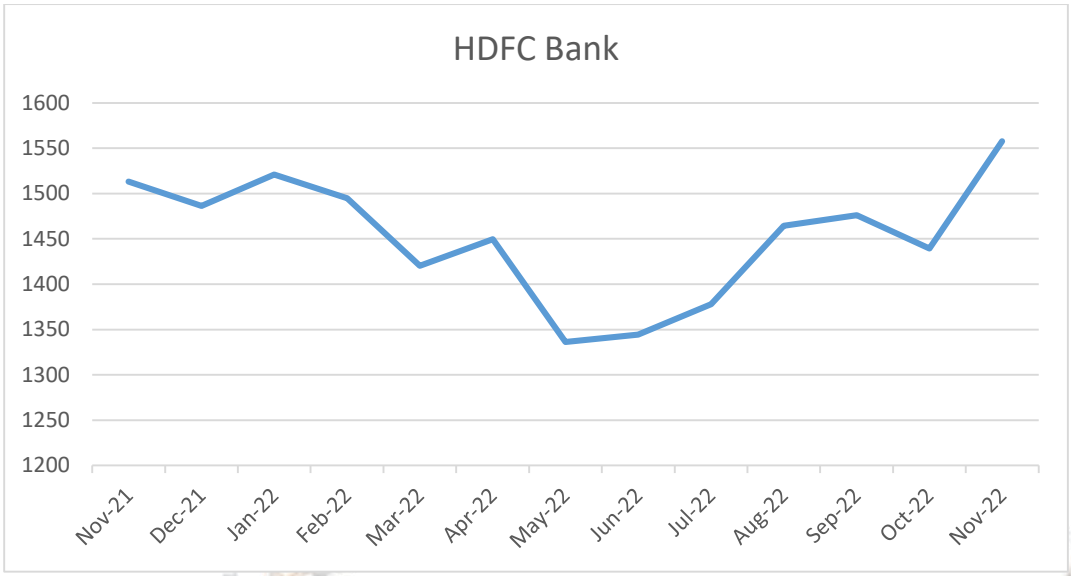

Figure 22

HDFC Bank has high volatility which makes it less desirable for risk-averse investors to invest in this stock but risk lovers would probably invest in this stock as higher risk can also have higher profits.

Pre Covid-19 Bank Nifty Stocks

The graphs plotted now will the data taken from the pre Covid-19 period and we will see the volatility of these stocks from Bank Nifty. Since the stocks have a strong positive correlation, the Covid-19 has not had a significant enough influence on the stock market. The stock market has a history of being susceptible to panic neuroses, and this is one of such times. Nevertheless, the market recovered quickly due to strong business results, high levels of domestic and FDI investments, high levels of liquidity as a result of global monetary stimulus, etc. Because of its solid fundamentals and the concern about global inflation, India continues to be a favoured investment option among peer emerging economies, maintaining its long-term development story.

1. Punjab National Bank (PNB.NS)

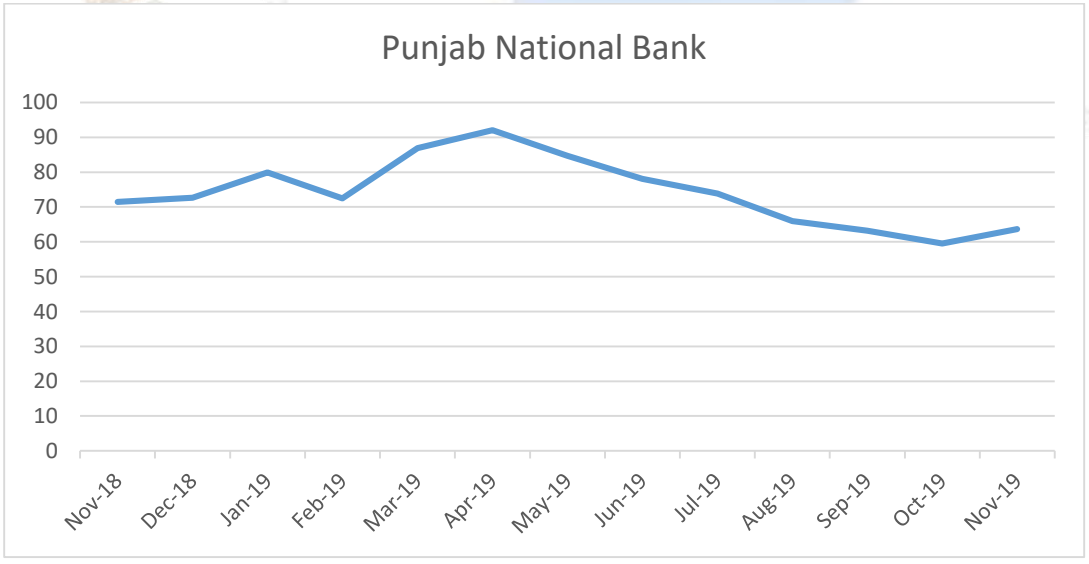

Figure 23

PNB has comparatively slightly higher volatility during the pre-pandemic period than the post-pandemic period. But the volatility is still not very high for risk-averse investors to not invest in this stock.

2. IDFC Bank (IDFCFIRSTB.NS)

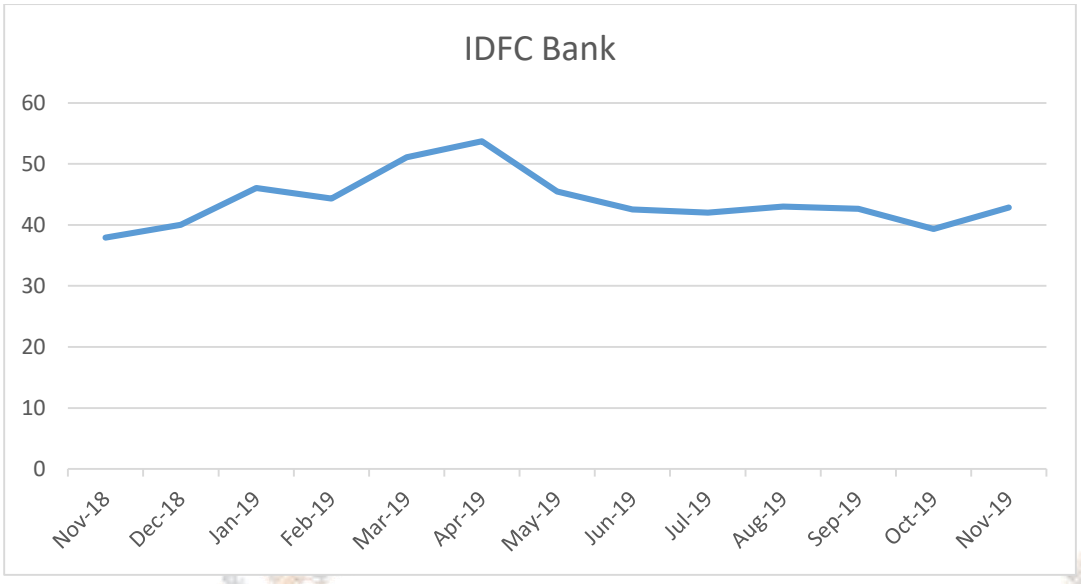

Figure 24

IDFC Bank has low volatility except in the months from February 2022 to May 2022. This stock seems to be desirable for risk-averse investors to invest in this.

3. Federal Bank (FEDERALBNK.NS)

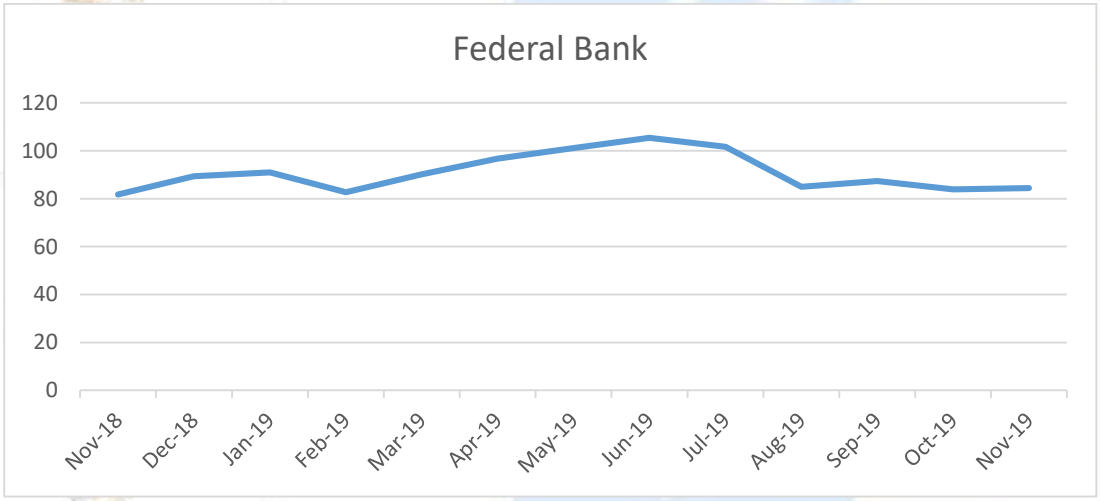

Figure 25

Federal Bank has low volatility which makes it desirable for risk-averse individuals to invest in this stock.

4. Bank of Baroda (BANKBARODA.NS)

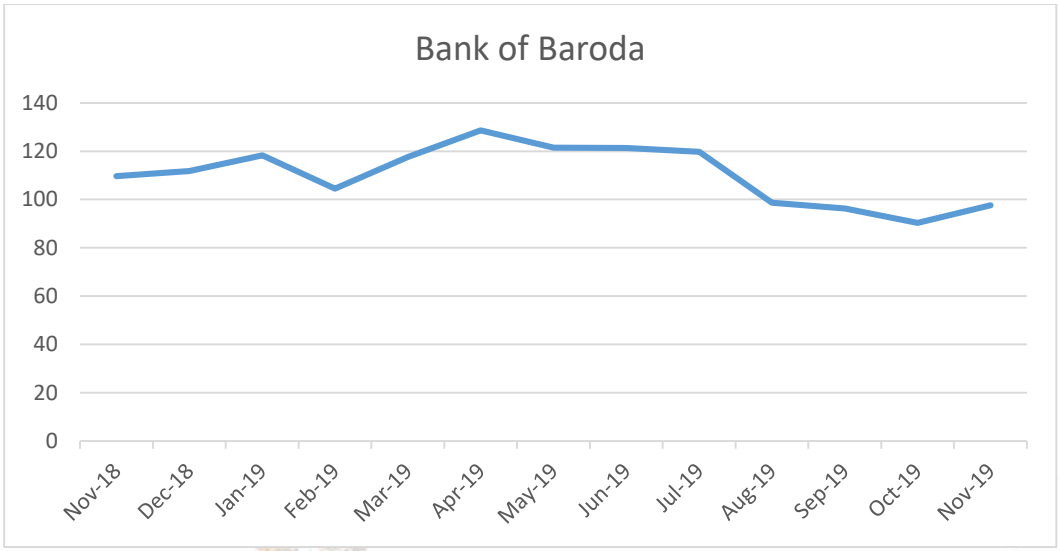

Figure 26

Bank of Baroda has a slightly high volatility compared to the other banks in the Bank Nifty above. But the volatility is still not as high as to make risk-averse individuals feel less interested to invest in this stock. It also has a slight downward trend.

5. Bandhan Bank (BANDHANBANK.NS)

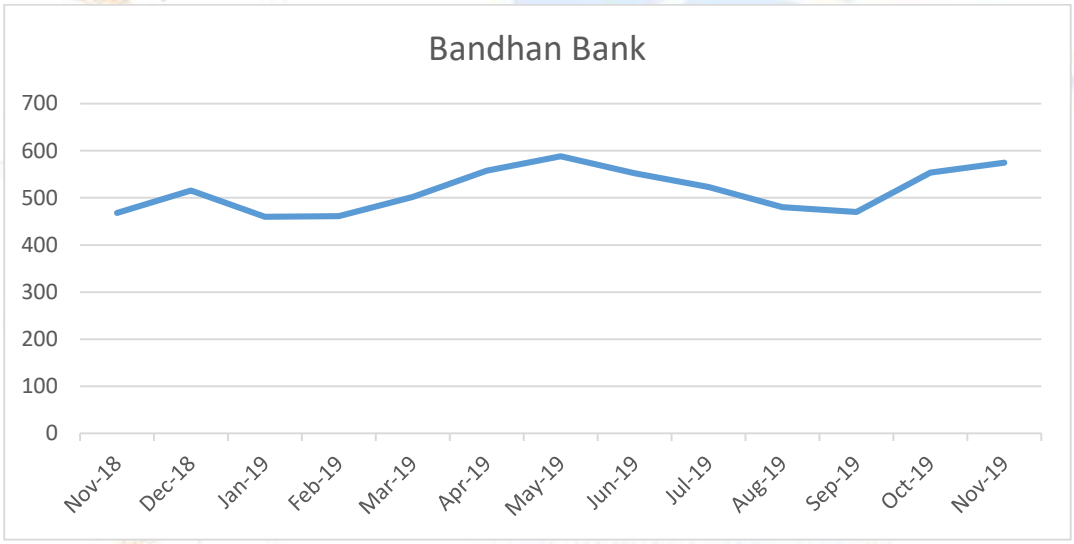

Figure 27

Bandhan Bank has low volatility which makes it desirable for risk-averse individuals to invest in this stock.

6. State Bank of India (SBIN.NS)

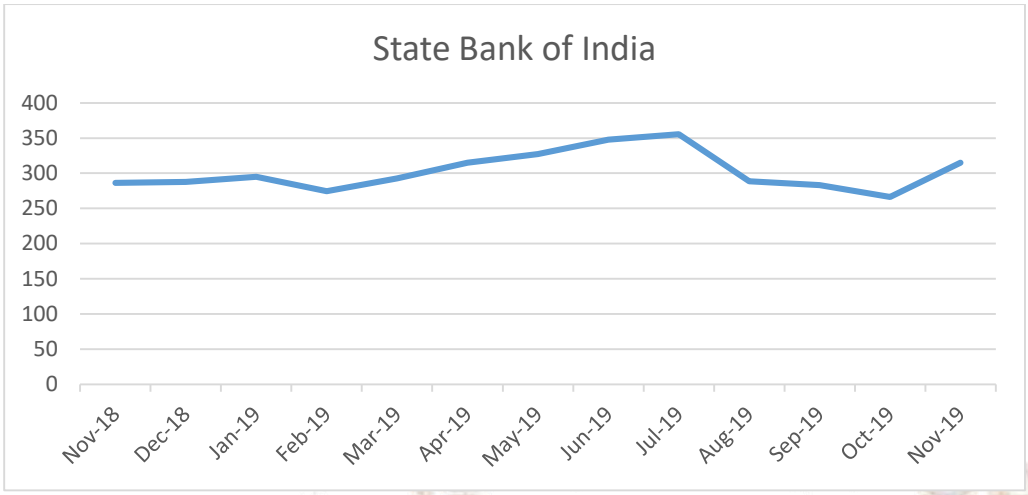

Figure 28

SBI has low volatility which makes it desirable for risk-averse individuals to invest in this stock.

7. AU Small Finance Bank (AUBANK.NS)

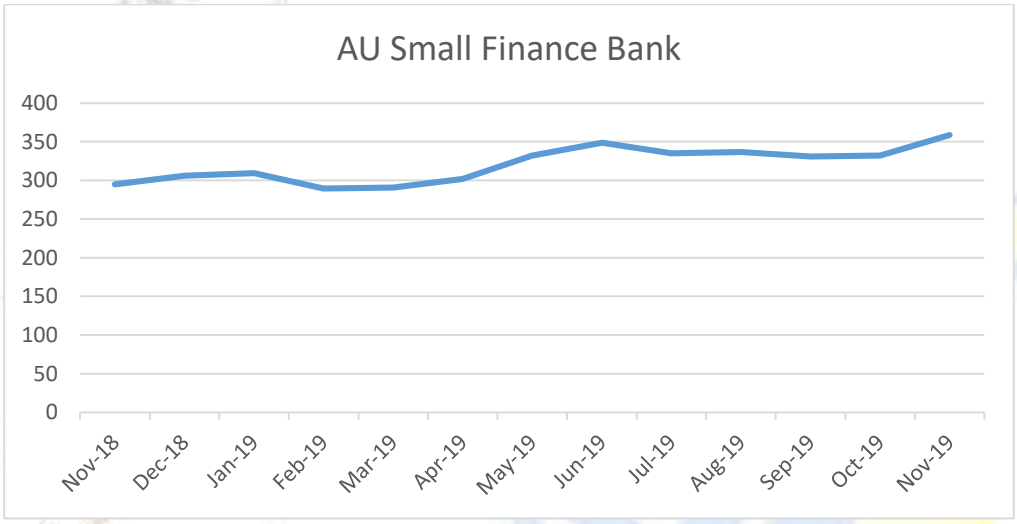

Figure 29

AU Small Finance Bank has very low volatility with a slightly upward trend which makes it desirable for risk-averse individuals to invest in this stock.

8. AXIS Bank (AXISBANK.NS)

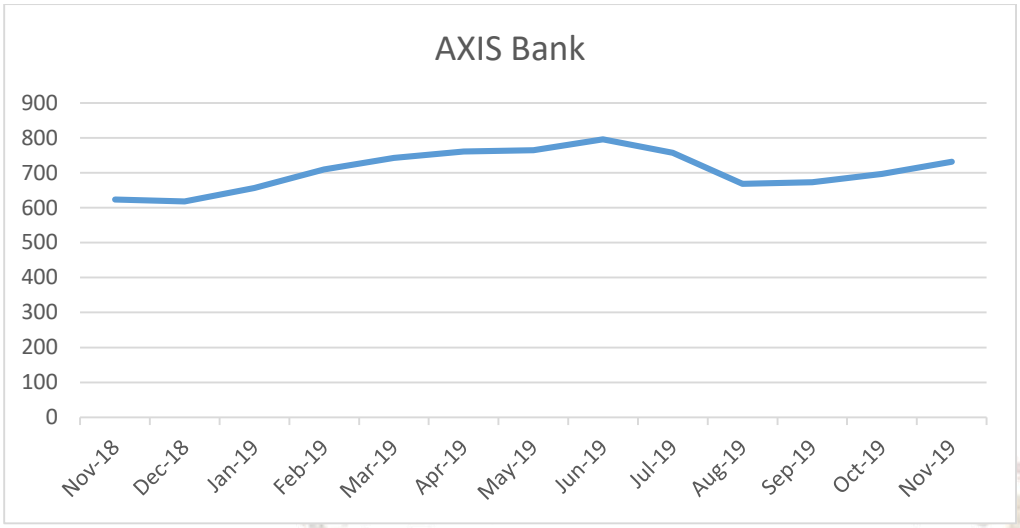

Figure 30

Axis Bank has very low volatility with a slightly upward trend which makes it desirable for risk-averse individuals to invest in this stock.

9. Kotak Mahindra Bank (KOTAKBANK.NS)

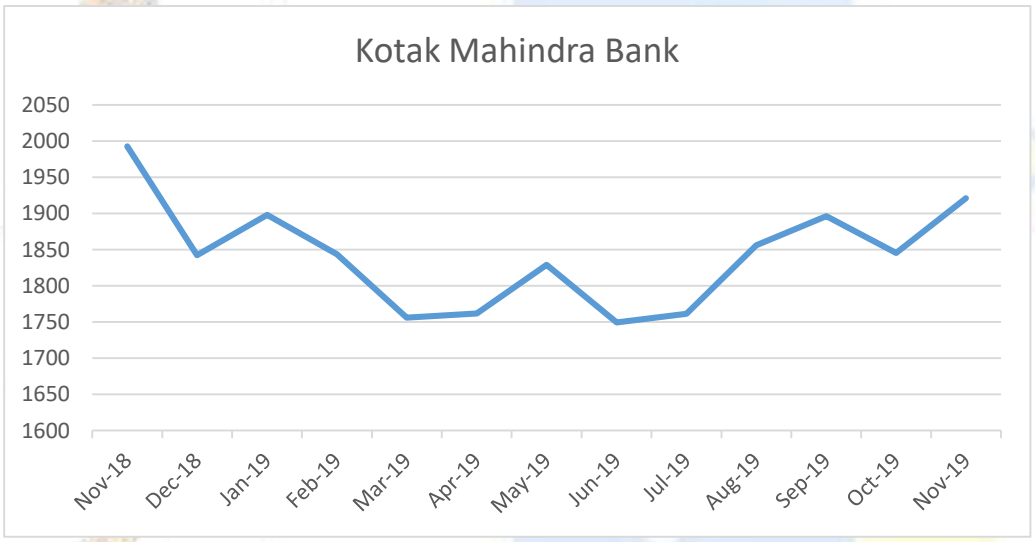

Figure 31

Kotak Mahindra Bank has very high volatility which makes it less desirable for risk-averse investors to invest in this stock but risk lovers would probably invest in this stock as higher risk can also have higher profits.

10. Indusind Bank (INDUSINDBK.NS)

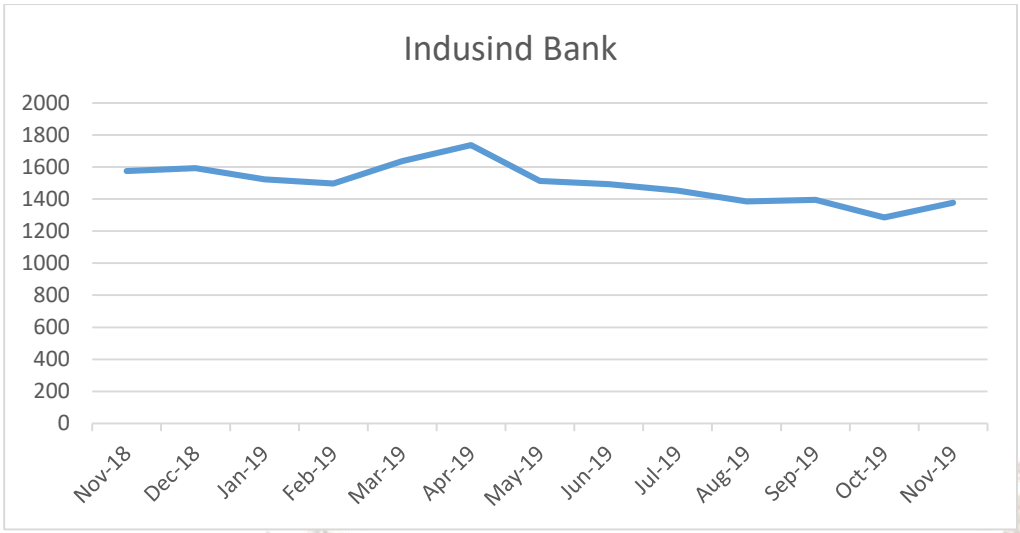

Figure 32

Indusind Bank has very low volatility which makes it desirable for risk-averse individuals to invest in this stock.

11. ICICI Bank (ICICIBANK.NS)

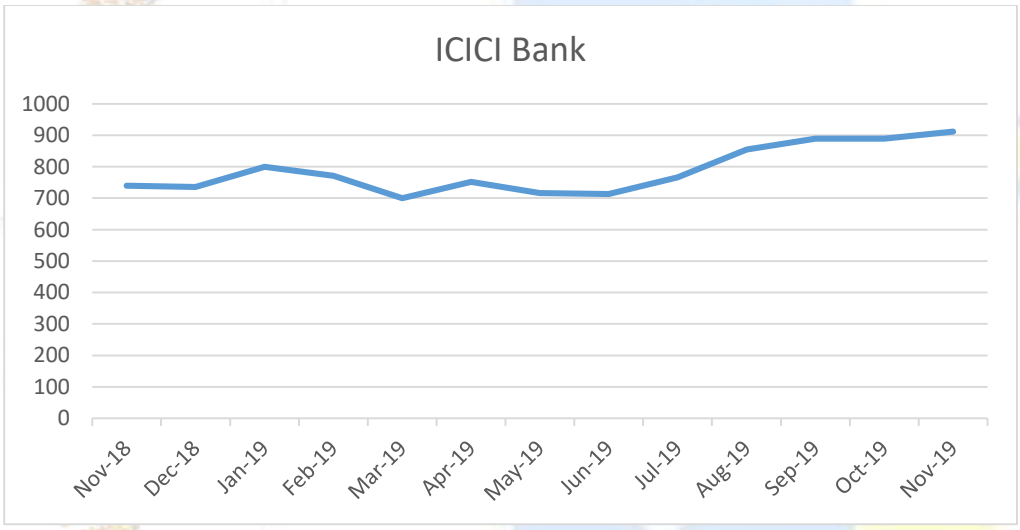

Figure 33

ICICI Bank has very low volatility with a slightly upward trend which makes it desirable for risk-averse individuals to invest in this stock.

12. HDFC Bank (HDFCBANK.NS)

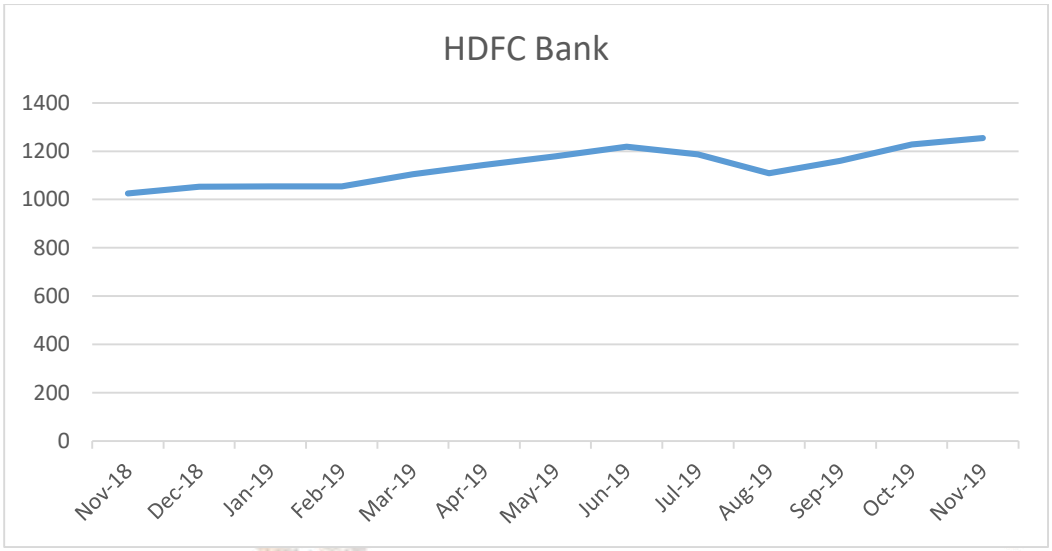

Figure 34

Compared to the post-pandemic period, the volatility of HDFC Bank is very low with a slight upward trend. The post-pandemic volatility was extremely high. The volatility in the above graph is desirable for risk-averse individuals.

Findings

We can see that the difference between pre-pandemic and post-pandemic is not very significant except for except a few banks in Bank Nifty. For instance, PNB had slightly more volatility in the pre-pandemic time and low volatility in the post-pandemic time. Bank of Baroda had an upward trend with low volatility in the post-pandemic period whereas it was relatively stationary with not many fluctuations in the pre-pandemic period. Bandhan Bank had low volatility and a downward trend in the post-pandemic period whereas it had an upward trend with comparatively lower volatility in the pre-pandemic period. AU Small Finance Bank had comparatively a slightly higher volatility in the post-pandemic period while it had a slightly upward trend with low volatility in the pre-pandemic period. Axis Bank had a slight upward trend with comparatively a higher volatility in the post-pandemic time than the pre-pandemic time which had somewhat a stationary trend with low volatility. Kotak Mahindra had extremely high volatility in the pre-pandemic time as well as in the post-pandemic time. Indusind Bank had a slight upward trend in the post-pandemic time with low volatility while it had somewhat stationary trend with low volatility in the pre-pandemic time. HDFC Bank was highly volatile with a slight upward trend during the post-pandemic time whereas it had a slight upward trend with low volatility in the pre-pandemic time. At the end of February, India began to see the effects of the virus. Due to the coronavirus fear, the Indian stock market had a significant decline on February 28th, wiping off more than Rs. 5 lakh crores in investor capital. The Indian indices had a 3.5% decline, the second-largest decline in Sensex history. The Sensex fell more than 1900 points in one day on March 9, 2020. Although many businesses were having various issues during the shutdown, the market recovered after that and the majority of stocks increased. This is thought to be the biggest intraday fall since August 2015.

Limitations

1. Risk: You run the risk of losing everything you invest. If a company performs poorly, investors will sell their shares, which will lower the stock price. When you sell, you won't get your initial investment back.

2. Time: If you're doing your own investing, you'll need to research each company to determine its likelihood of being profitable before buying its stock. You must develop your ability to read news stories, annual reports, and financial statements regarding your corporation.

3. Taxes: If you sell your stocks at a loss, you may be entitled to a tax credit. If you sold your shares for a profit, however, you would have to pay capital gains taxes.

4. Stock prices change drastically, increasing and dropping seconds apart. People frequently buy low out of greed and sell cheaply out of fear.

Suggestions

Many investors enter a panic state and begin to question their investment methods when the stock markets are erratic. This is especially true for novice investors, who are frequently tempted to sell their holdings and keep them until the appropriate moment to buy them back. Every investor needs to be aware of the fact that market volatility cannot be avoided. It is difficult to time the stock market during these periods because it is in the nature of stock markets to experience highs and lows, even over short periods of time. The best course of action in such unstable circumstances is to focus on long-term investments while ignoring brief market changes. This is a tried-and-true technique for many seasoned investors, but they must also have a firm grasp of the markets and the tricks that can help them recover from any potential losses. Staying invested while ignoring the short-term market fluctuations is one tactic. Implementing this can be more difficult than it sounds because a bear market might result in a portfolio loss of 50% or more.

The buy-and-hold approach is a common misperception among traders, as even long-term purchases require extensive research and an awareness of how company fundamentals affect the markets. Your investment won't be impacted by short-term market swings if you've made it in the stock of a company with a solid balance sheet and years of stable profitability. If the company is good for long-term investments, a market downturn like this is a great time for investors to buy the stocks. Investors need to be cautious about the kind of orders they select when the markets are not heading in the direction predicted or in their typical method. Investors might use limit orders to their advantage when placing orders because they lower the potential losses brought on by inaccurate quotes.

Finally, it can be argued that during periods of stock market volatility, investors must be mindful of any potential risks. Therefore, if you are sure in the investing approach you have adopted, the experts' advice keeping involved. The abrupt shifts, however, can have a negative impact on your trades if you have chosen to trade in risky markets.

Conclusion

But it's crucial to understand that risk and volatility are not the same thing. Volatility and risk are closely related for stock traders who want to buy cheap and sell high each trading day. For people who might need to sell their investments soon, including those who are approaching retirement, volatility is also important. The daily swings of those companies, however, don't really relevant to long-term investors who often keep stocks for long periods of time. When you let your assets grow for a very long time into the future, volatility is merely noise. Even yet, the dangers of long-term investing are more closely tied to being mistaken about a company's growth potential or paying too much for such growth than to volatility. Nevertheless, stock market volatility is a crucial idea that all investors need to understand. Although benchmark indices' future may not be particularly thrilling, stock-specific movement may very well continue, according to experts. The Indian market is imitating what is going on around the world. The US stock market has reached a new record high, and emerging markets, including India, are feeling the effects. Neither in the US nor in India are we yet free of COVID. Thus, what we are witnessing is a rally for hope. Yes, some businesses might profit from the repressed demand until the economy returns to normal, but that won't happen for a while. There isn't a single strategy that works for all investors during periods of increased stock market volatility because every investor's circumstances are unique. Review your scenario, objectives, and existing plan carefully, and think of methods to maximise the circumstances. Additionally, perform some market research and learn about the various strategies that can still help you achieve your goals.

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