A STUDY ON UNDERSTANDING THE LOSS OCCURRED TO TRADERS IN INTRADAY TRADING WITH SPECIAL REFERENCE TO ANGEL ONE BROKING FIRM

Project report submitted in partial fulfilment for the requirement for the award of the Degree of Bachelor of Business Administration with computer application.

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CERTIFICATE

This is to certify that the Project work entitled "A study on understanding the loss occurred to traders in intraday trading with special reference to angel one brokerage firm" in partial fulfilment of requirements for the degree of Bachelor of Business Administration with Computer Applications to University, Coimbatore, is a record of bonafide work carried out by ABILASH.S. Reg No:20BBA203 and that no part of this has been submitted for the award of any other degree or diploma and the work has not been published in popular journal or magazine.

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DECLARATION

I hereby declare that the Project work entitled " A Study on understanding the loss occurred to traders in intraday trading with special reference to angel brokerage firm" submitted to Bharathiar University, Coimbatore, in partial fulfilment of the requirements for the award of degree of Bachelor of Business Administration with Computer Applications is an original work and it has not been previously formed the basis for the award of any Degree, Diploma, Associate ship, Fellowship or similar titles to any other university or body during the period of my study.

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Signature of the Candidate

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ABSTRACT

In this paper we present a theory and some empirical evidence on stock price manipulation in the Indian markets. We consider what happens when a manipulator can trade in the presence of other traders who seek out information about the stock's true value. In a market without manipulators, these information seekers unambiguously improve market efficiency by pushing prices up to the level indicated by the informed party's information. In a market with manipulators, the information seekers play a more ambiguous role. More information seekers imply greater competition for shares, making it easier for a manipulator to enter the market and potentially worsening market efficiency.

This suggests a strong role for government regulation to discourage manipulation while encouraging greater competition for information. Using a unique dataset, we then provide evidence from SEC actions in cases of stock manipulation. We find that potentially informed parties such as corporate insiders, brokers, underwriters, large shareholders and market makers are likely to be manipulators. More illiquid stocks are more likely to be manipulated and manipulation increases stock volatility. Prices and liquidity are higher when the manipulator sells than when the manipulator buys. In addition, at the time the manipulator sells, prices are higher when liquidity is greater and when volatility is greater.

These results are consistent with the model and suggest that stock market manipulation may have important impacts on market efficiency. Despite the significant attention that market manipulation has received in recent years many aspects of it are poorly understood. This article identifies from the theoretical and empirical literature what we do and do not know about market manipulation, and suggests directions for future research. We know that manipulation is possible and that it occurs in a wide variety of markets and circumstances.

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CHAPTER I

INTRODUCTION

1.1. Overview of the Study

The term "stock market" often refers to one of the major stock market indexes, such as the Dow Jones Industrial Average or the S&P 500. These represent large sections of the stock market. Because it's hard to track every single company, the performance of the indexes is viewed as representative of the entire market. You might see a news headline that says the stock market has moved lower, or that the stock market closed up or down for the day. Most often, this means stock market indexes have moved up or down, meaning the stocks within the index have either gained or lost value as a whole. Investors who buy and sell stocks hope to turn a profit through this movement in stock prices.

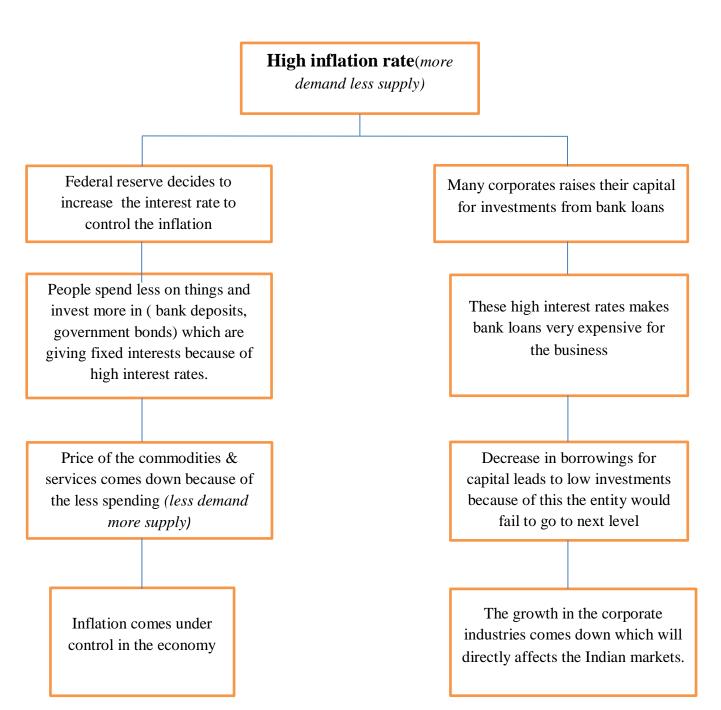
How the Market Works

When you purchase a public company's stock, you're purchasing a small piece of that company. The stock market works through a network of exchanges — you may have heard of the New York Stock Exchange or the NASDAQ. Companies list shares of their stock on an exchange through a process called an initial public offering, or IPO. Investors purchase those shares, which allow the company to raise money to grow its business. Investors can then buy and sell these stocks among themselves.

Buyers offer a "bid," or the highest amount they're willing to pay, which is usually lower than the amount sellers "ask" for in exchange. This difference is called the bid-ask spread. For a trade to occur, a buyer needs to increase his price or a seller needs to decrease his. This all may sound complicated, but computer algorithms generally do most price-setting calculations. When buying stock, you'll see the bid, ask, and bid-ask spread on your broker's website, but in many cases, the difference will be pennies, and won't be of much concern for beginner and long-term investors.

Impact of inflation on Indian markets

We normally tend to equate inflation as a negative trigger for equity markets. The reasons are not far to seek. Higher inflation means a higher cost of living and, therefore, lower purchasing power. When inflation goes up, people earn less in real terms, and that results in lower returns net of inflation. Secondly, higher inflation means higher rates of interest, and that also impacts the cost of equity.



1.2. Industry Profile

Secondary Market Industry

The secondary market is where investors buy and sell securities they already own. It is what most people typically think of as the "stock market," though stocks are also sold on the primary market when they are first issued. The national exchanges, such as the New York Stock Exchange (NYSE) and the NASDAQ, are secondary markets. Though stocks are one of the most commonly traded securities, there are also other types of secondary markets. For example, investment banks and corporate and individual investors buy and sell mutual funds and bonds on secondary markets. Entities such as Fannie Mae and Freddie Mac also purchase mortgages on a secondary market. Transactions that occur on the secondary market are termed secondary simply because they are one step removed from the transaction that originally created the securities in question. For example, a financial institution writes a mortgage for a consumer, creating the mortgage security. The bank can then sell it to Fannie Mae on the secondary market in a secondary transaction.

Difference between the primary market and the secondary market

In the primary market, securities are offered to public for subscription for the purpose of raising capital or fund. Secondary market is an equity trading avenue in which already existing/pre- issued securities are traded amongst investors. Secondary market could be either auction or dealer market. While stock exchange is the part of an auction market, Over-the-Counter (OTC) is a part of the dealer market.

1.3. Company Profile

Angel One Limited, formerly known as Angel Broking Limited, is an Indian stockbroker firm established in 1996. The company is a member of the Bombay Stock Exchange, National Stock Exchange of India, National Commodity & Derivatives Exchange Limited and Multi Commodity Exchange of India Limited. It is a depository participant with Central Depository Services Limited (CDSL).

History

Angel Broking was incorporated on 8 August 1996 as a private limited company. Later, Angel Broking was incorporated as a wealth management, retail and corporate broking firm in September, 1997. In November 1998, Angel Capital and Debt Market Ltd. gained membership of National Stock Exchange as a legal entity. The company Opened its commodity broking Division in April, 2004. In November 2007, Birla Sun Life Insurance joined hands with Angel Broking for distribution of its insurance products. The International Finance Corporation bought an 18% stake in Angel Broking for ₹152 crore (equivalent to ₹390 crore or US\$49 million in 2020) in December 2007. The company opened an office in Karol Bagh, New Delhi in October 2012.

In January 2013, a probe found the company and two other entities involved in fraudulent and unfair trade practices in transactions of shares of Sun Infosys during Feb-May 2001. As a result, SEBI restrained from taking new clients for a period of two weeks. Angel filed an appeal against the SEBI order which was dismissed by the Securities appellate tribunal. Angel Broking began offered shares through an initial public offering in September 2020, and was listed on the Bombay Stock Exchange and the National Stock Exchange on 5 October 2020. The company rebranded as Angel One in 2021

The company offers multiple online trading apps. Services include online stock broking, depository services, commodity trading and investment advisory services, personal loans and insurance, portfolio management services, IPOs business and mutual funds distribution.

1.4. Need for Study

Trading is the buying and selling of securities, such as stocks, bonds, currencies and commodities, as opposed to investing, which suggests a buy-and-hold strategy. Trading success depends on a trader's ability to be profitable over time. Based on the survey taken by a financial brokerage called angle broking it is shown that 90% of Day traders losing their money in stock market. As much as 90% of day traders lose money in the market, it demands a research. Intraday trading is the most popular, yet data suggests that most intraday traders lose money. A 70% don't last beyond the first year, and 90% stop trading by the third year. Why such a high percentage of traders lose money in day trading even with proper knowledge.

1.5. Objectives of the Study

Primary Objective

• To study how the retail traders losing their money in the market.

Secondary Objectives

- To study on concept of liquidity in the market.
 - ✓ Big Orders placed by institutions.
 - ✓ Manipulation on Price action trading.
- To study about how FII's & DII's manipulate the market.
 - ✓ Front running (News channel manipulation).
 - ✓ Insider trading.
- To study on federal reserves announcements affects Indian markets.
 - ✓ Hiking the interest rates based on inflation data.

1.6. Scope of the Study

The scope studies about suggestions to the financial market participants, internal and the external influence, to create a true awareness about markets and reduce the losses and thereby they can increase the profitability. And to expose the operators manipulations through that it can enhance the financial literacy in our economy. Market manipulation is conduct designed to deceive investors by controlling or artificially affecting the price of securities Manipulation is illegal in most cases, but it can be difficult for regulators and other authorities to detect and prove .Market manipulation may involve factually false statements as well, but it always seeks to influence prices in order to mislead other market participants.

1.7. Limitations of the Study

• The results of the study are appropriate only for the market participants and it may not be used in any other company within the same industry due to differing environmental factors.

- The learning of the study is not applicable to any other branch of the company located in any other geographic location.
- The solution provided by the research is not applicable to any other company in any other industry.
- The findings of the research is not applicable to any other sister concern of the same company.

CHAPTER 2

LITERATURE REVIEW

Financial markets are the engines of economic growth in all countries, so that the number of financial markets, and the volume and types of their activities are important indicators of a country's development and economic level (Sun et al., 2017). Thus, the existence of active and developing financial markets are essential for any developed economy (Chan & Ka, 2014).

When economic markets lack the efficiency required to carry out their functions, economic health would be disrupted severely, and the resulting consequences are felt at the national and even international levels (Roodposhti et al., 2011). Manipulation is one of the major challenges of financial e-markets, and manipulation methods are becoming increasingly more complex as markets expand. Manipulation is a reality in financial markets and an example of market abuse that dates back to the formation of the first economic market (Amsterdam, the Netherlands) (Roodposhti et al., 2011, Sun et al., 2017).

Due to the variety of financial markets and consequently various methods of manipulating them, there are various definitions of Market Manipulation (MM) (Comerton-Forde and Putniņš, 2011, Putniņš, 2020). MM, according to the Federal Bureau of Investigation (FBI), is defined as individual or group schemes that try to interfere with a fair and regular market to gain their own profit (FBI, 2007). The US Securities and Exchange Commission (SEC) defines MM as intentional interference with free forces of supply and demand of stock that is frequently done in order to deceive investors by controlling or affecting prices or market activity of a specific type of stock (IOSCO, 2000). Therefore, MM encompasses all activities in which individuals or groups create artificial prices in a variety of ways and present an unreal picture of market activity in order to mislead or defraud other investors and traders (Alexander & Cumming, 2020).

There are numerous classifications of MM, among which Allen and Gale (1992) developed one of the most well-known and comprehensive classifications, introducing

three types of manipulation: "information-based" (dissemination of incorrect or misleading information to change the price of an asset in the desired direction), "action-based" (taking actions beyond the trades - for example, operational changes in a company or selling a branch of the company without informing the shareholders - to change the actual or perceived value of an asset) and "trade-based" (the attempts of manipulation by selling or buying the asset in a specific way).

The first two types of above-mentioned manipulations have been addressed to some degree, so much so that the companies, in order to deal with the first type of manipulation, are required to regularly disclose their financial information and activities to the public, and the intentional expression of false statements is considered a crime. On the other hand, in order to tackle the second type of manipulation, according to the law, any selling of assets by managers and administrators of companies whose financial information and activities (e.g., selling strategic assets or merging corporations) are not already announced to the public, is prohibited and illegal (Diaz et al., 2011, Kim and Sohn, 2012, Shi et al., 2019). However, confronting the third type of manipulation is more difficult because these kinds of manipulations seem to be legal in appearance and no objective violation can be found, but since some of these trades may be spoofing or carried out based on collusion and intentional fraud, they are considered as manipulations that are difficult to detect (Alexander and Cumming, 2020, Allen and Gale, 1992).

The problem of Trade-Based Manipulation (TBM) has always been of particular importance due to its breadth and depth, as well as its significant economic impact (Frunza, 2015). This type of manipulation is difficult to distinguish, because, in appearance, the trades are taking place (that is, a stock is actually sold or bought) and therefore the market surveillant cannot question the trades without a reason. But in fact, such trades are made by a specific group that has common interests, in other words, it is a kind of formal trade for deceiving other shareholders. TBM, in the aftermath of the 2010 flash crash, has piqued the interest of researchers and managers more than ever (Cao et al., 2014, Dalko and Wang, 2020, Wang et al., 2012). Because TBM methods are so diverse, and even infinite, supervisors face certain challenges and complexities in detecting and tracking them. Despite the attempts made in this regard, TBM Detection (TBMD) is difficult and remains as an open problem.

Accordingly, this study has a central focus on TBMD. In this paper, for the sake of simplicity, TBM is briefly referred to as Market Manipulation (MM).

MM causes investors and traders to suffer heavy losses continuously, while manipulators make unconventional profits. These unfair conditions are the most harmful ones a financial market can face. For example, in a 20-minute manipulation by one person, a financial market lost about \$1 trillion (Dalko & Wang, 2020). Or as another example, a group of traders who colluded to artificially raise asset price caused approximately about 20,000 investors to suffer losses totaling more than \$30 million (Alexander & Cumming, 2020).

The effect of manipulation activities on financial markets and the resulting financial losses is much greater than these figures because MM affects market participants' trust (Golmohammadi & Zaiane, 2015), which may push them toward alternative markets. Thus, it reduces liquidity and raises trading costs, and ultimately leads to reduced employment and slower economic activity (Cao et al., 2016, Zhang et al., 2017).

As a result, in order to avoid the adverse consequences of manipulation, it is critical to detect and deal with manipulation activities in order to protect the interests of honest investors (Imisiker and Tas, 2018, Wang et al., 2019). This is because despite the quick and harsh reactions from legislators and markets to traders who commit such acts, this type of manipulation is becoming a serious problem, and it is considered as the most significant concern of market participants and supervisors today (Golmohammadi and Zaiane, 2015, Ngai et al., 2011).

Accordingly, this paper systematically reviews the research conducted in the area of MM in order to identify the challenges and open problems in this regard, to extract the data mining approaches, categories and techniques used by various researchers, for detecting and dealing with this type of manipulation, to identify the strengths and weaknesses of available research, and to provide approaches for solving some open problems in this area.

Given the critical importance of the problem of detecting Financial Fraud (FF), many review articles have been written in this area. Such reviews have primarily focused on subjects such as fraud areas, types of fraud, fraud detection approaches and techniques, and challenges and issues being faced in fraud detection. Review studies on FF detection have investigated different types of FF, such as bank (Abdallah et al., 2016, Ahmed et al., 2016, Golmohammadi and Zaiane, 2012, Ngai et al., 2011, Phua et al., 2012, Sadgali et al., 2019, Sinayobye et al., 2018, West and Bhattacharya, 2016), telecommunication (Abdallah et al., 2016, Ahmed et al., 2016, Phua et al., 2012, Sinayobye et al., 2018), insurance (Abdallah et al., 2016, Ahmed et al., 2018, West and Bhattacharya, 2016), corporate (Abdallah et al., 2016, Sinayobye et al., 2018), auction (Abdallah et al., 2016, Sinayobye et al., 2018), shopping in website (Phua et al., 2012), and Smart meter data (Sinayobye et al., 2018).

These studies expressly stated that the literature on the type of fraud investigated is extremely unbalanced. For instance, West and Bhattacharya (2016) who examined studies on FF from 2004 to 2014, claimed that while many studies have been conducted on some types of fraud, such as credit card and financial statement fraud, no studies have been conducted on stock market fraud. In a review of the literature on fraud from 1997 to 2008, Ngai et al. (2011) indicated that many studies on corporate and credit card fraud had been conducted, but there was a lack of literature on stock market fraud. Similarly, Sadgalia et al. (2019) emphasized the same issue in his review study on fraud from 2007 to 2017. In fact, all of the aforementioned studies have unanimously emphasized a lack of research on stock market fraud. However, based on these review articles, many studies have been conducted on certain types of FF, such as credit card (Abdallah et al., 2016, Ngai et al., 2011, Phua et al., 2012, Sadgali et al., 2019, Sinayobye et al., 2018, West and Bhattacharya, 2016), telecommunication (Sinayobye et al., 2018), and financial statement (West & Bhattacharya, 2016).

As shown in Table 1, review articles on the detection of FF were often conducted to investigate data mining applications as well as to classify data mining techniques. However, there is no review article on stock market fraud, despite its great significance. Therefore, in order to bridge this research gap, the present study, for the

first time, has conducted a Systematic Literature Review (SLR) on detecting fraud in stock market trades (known as the most challenging, important, and tangible fraud in today's world) in order to increase the understanding of researchers and participants about the available scientific knowledge and conducted studies. To do so, different types of manipulations and anomalies, data mining approaches and categories, manipulation detection techniques, associated challenges, and research gaps in stock market manipulation detection are investigated and covered in this study. In addition to the foregoing, as the first SLR in this area, this study thoroughly and extensively examined the literature, so that their objectives, methodologies, strengths and weaknesses, findings, and research suggestions were all summarized in a table presented in the appendix A.

The first proposed approach was to generally identify the collusive trend of all traders in collected trading records. We termed it as: coarse identification of the collusive clique. This approach was to group all traders into a number of clusters, where the traders tend to trade heavier with traders within the cluster than the ones outside. We proposed a transformation of the transaction data together with k-means clustering algorithm to group the traders according to their trading behaviours. The result of this approach aimed to show a general tendency of how traders gather together for transactions. This was especially useful when experiencing high-frequency trading (HFT), where the characteristics of whole transactions were important instead of every single one among the huge number of orders and trades generated by HFT. In this approach, the 'distance' between any two traders was defined as the transacted volume: the larger the volume, the closer the `distance'. Through this, the tailor-made k-means clustering approach can be easily applied with reduced time complexity since the calculation of 'distances' among 'points' in standard k-means has been moved to the proposed transformation of the transaction data. This showed an effective application of well-known data mining algorithm on an unsolved and challenging problem.

The second proposed approach, on the other hand, was a fine identification, which was to accurately identify the "passing the parcel" transactions that were intendedly created by collusive traders. This was particularly useful when the regulatory monitoring intends to find out in detail which traders are involved in collusive

transactions and how they organize such activities. This fine identification was formulated as a simplified Knapsack problem, a well-known combinatorial optimisation problem. In this approach, transaction records were considered as the knapsack and the symbolic sum of traders in the transactions were considered as the weight of the knapsack while the number of the transactions shall be maximized. To solve this, a tailor-made unified dynamic programming based algorithm (DP) was proposed. DP is usually used in complex optimization proble

ms. In our approach, DP was proposed as a recursive problem, where each possible solution on current transaction can be optimized by selecting either the solution based on last transaction or the one only based on the current transaction. Through this, the fine identification problem was split into several smaller problems. This idea is popular in complex optimization problems where the original problem is usually split into a collection of simpler sub-problems. In addition, to make the problem more general, margins were included in the optimization process to compensate the uncertainty occurred in real trading scenarios.

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The closing price is important in finance. It is the most commonly used financial data in both academia and industry. Given its importance, it is also exposed to market manipulation which is defined as stock prices being artificially influenced (Allen and Gale 1992). However, most quantitative trading strategies use the official closing price as their input. This study examines the profitability impact of closing price market manipulation on technical trading strategies.

Putniņš (2012) and Thoppan and Punniyamoorthy (2013) provide comprehensive surveys on market manipulation. Allen and Gale (1992) are early pioneers to start studies on market manipulation and formalize the study. They also introduce the concept of trade-based and information-based manipulation to classify cases of market manipulation. Aggarwal and Wu (2006) investigate cases of stock market manipulation and conclude that market manipulation alters stock returns as a result.

Market manipulation is not a problem only specific to some particular stocks. Closing prices of all stocks are also subject to manipulation especially on some particular dates. Ni et al. (2005) and Agarwalla and Pandey (2013) study the expiration-day effect; Ritter (1988) studies the end-of-year effect; Ariel (1987) studies the monthly effect; Cross (1973), Keim and Stambaugh (1984), Harris (1986), French (1980), Admati and Pfleiderer (1989), and Kamara (1997) study the weekday effect. Closing price manipulation occurs regardless of the specialty of the day.

Evidence of closing price manipulation in different financial markets has been studied in the literature. Cheung (1995) studies Hong Kong stock market; Felixson and Pelli (1999) study Finland stock market; Harris (1989), Chang et al. (1995), and Cushing and Madhavan (2000) studies the United States stock market; Hillion and Suominen (2004), Michayluk and Sanger (2006), and Kandel et al. (2012) study the France stock market; Kucukkocaoglu (2008) studies the Istanbul stock market; McInish and Wood (1990) study the Canada stock market; Hsieh (2015) studies the Taiwan stock market; Kandel et al. (2012) study the Italy stock market; Hagströmer and Nordén (2014) study the Sweden stock market. The day-end effect on the closing price is far from an area-specific problem.

The evidence of closing price manipulation is the systematic price movement near the market close. This anomaly potentially affects everything that relies on the closing price, including return calculation and valuation. Stock exchanges over the world seek a solution to prevent closing price manipulation. Many exchanges introduce closing call auctions to determine the closing price to decrease the chance of manipulation. Comerton-Forde and Rydge (2006) investigate various algorithm designs for call auctions. They find that some algorithm designs of call auction systems can prevent manipulation. Empirically, Comerton-Forde et al. (2007), Pinfold and He (2012), Hagströmer and Nordén (2014), Huang and Chan (2014), and Kadıoğlu et al. (2015) study the implementation of closing call auction in different regions. The results mainly show that closing call auction reduces manipulation. Most major exchanges adopt closing auction methodology to determine the closing price.

Additionally, Hillion and Suominen (2004) and Comerton-Forde and Putniņš (2011b) use theoretical model to study real stock manipulation cases to seek explanation for manipulation. Both models suggest strong incentives for market manipulation. With the rise of high-frequency trading possibly to exploit the opportunity, Aitken et al. (2015) find increases of manipulation in both frequency and severity. Comerton-Forde and Putniņš (2011a) and Comerton-Forde and Putniņš (2013) formulate frameworks for the measurement of manipulation in terms of frequency and severity. Bogousslavsky and Muravyev (2020) study order imbalances at the close and find that order imbalances potentially can distort closing prices.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Research Design

The research is used for this study based on the survey taken by the financial brokerage called angel one.

3.2 Sources of Data

Primary Data

The data those are collected as fresh for the first time and happen to be original in character are called as primary data .Primary data collected through traders community.

Secondary Data

Secondary data are collected from,

- ✓ Financial Website.
- ✓ Social media.
- ✓ Business news articles.
- ✓ Financial influencers.

3.3 Sample Design

3.3.1Population

Retail traders

A retail trader is an individual trader who trades with money from personal wealth, rather than on behalf of an institution. A retail trader is someone who trades their own money. They buy or sell securities for personal accounts (PA).

3.3.2Sample Size

Operators manipulate retail traders who are using traditional price action. Traditional price action includes:

- Support & Resistance zones
- Trend lines.
- Indicators.

Price Action

Price action is a method of analysis of the basic price movements to generate trade entry and exit signals. It is a form of technical analysis, as it ignores the fundamental factors of a security and looks primarily at the security's price history.

3.4 Methods of Data Collection

✓ Financial Website.

The investment industry pays high salaries to analysts for making stock recommendations and forecasting markets.

✓ Social media.

Platforms like Telegram, Facebook, Instagram, etc... were used to promote or recommend the stocks which pulls the interest of retail investors.

✓ Business news articles.

Many of the news channels gives the pre-market report and shares their views for the particular stocks.

3.4 TOOLS FOR ANALYSIS

Technical analysis

The impact of supply and demand on changes in price, volume, and implied volatility is examined using technical analysis tools. It operates under the presumption that, when combined with suitable investing or trading rules, historical trading activity and price changes of a security can serve as valuable predictors of the security's future price movements. It can help improve the assessment of a security's strength or weakness compared to the overall market or one of its sectors. It is frequently used to generate short-term trading signals using different charting tools. Analysts can refine their overall valuation estimate by using this information.

Charting Tools

Support & Resistance



Table 1.1

Support and resistance denotes the demand & supply zones in the candle stick chart of the stock . whereas it changes based on the market moments. If the price falls below a support level, that level will become resistance. If the price rises above a resistance level, it will often become support. As the price moves past a level of support or resistance, it is thought that supply and demand has shifted, causing the breached level to reverse its role. As the name suggests, resistance is something which stops the price from rising further. The resistance level is a price point on the chart where traders expect maximum supply (in terms of selling) for the stock/index. The resistance level is always above the current market price. Having learnt about resistance, understanding the support level should be quite simple and intuitive. As the name suggests, support is something that prevents the price from falling further. The support level is a price point on the chart where the trader expects maximum demand (in terms of buying) coming into the stock/index. Whenever the price falls to the support line, it is likely to bounce back. The support level is always below the current market price.

Indicators



Table1.2

Trading indicators are mathematical calculations, which are plotted as lines on a price chart and can help traders identify certain signals and trends within the market. There are different types of trading indicator, including leading indicators and lagging indicators. A leading indicator is a forecast signal that predicts future price movements, while a lagging indicator looks at past trends and indicates momentum. Indicators are independent trading systems introduced to the world by successful traders. Indicators are built on preset logic, using which traders can supplement their technical study (candlesticks, volumes, S&R) to arrive at a trading decision. Indicators help buy, sell, confirm trends, and sometimes predict trends.

Trendlines

These are lines which are plotted on the charts to identify the actual trend in the current market .There are three types of trend :

Uptrend line



Table1.3

An upward trend provides investors with an opportunity to profit from rising asset prices. Selling an asset once it has failed to create a higher peak and trough is one of the most effective ways to avoid large losses that can result from a change in trend. Some technical traders utilize trendlines to identify an uptrend and spot possible trend reversals. The trendline is drawn along the rising swing lows, helping to show where future swing lows may form.

Downtrend line



Table1.4

A downtrend describes the movement of a stock towards a lower price from its previous state. It will exist as long as there is a continuation of lower highs and lower lows in the stock chart. The downtrend is reversed once the conditions are no longer met. For example, after a sustained period of a downtrend, the market may reverse back to an uptrend. The downtrend and uptrend cycles will fluctuate, and the timing of each occurrence is always different. As the length and duration of a downtrend may vary, traders can trade a downtrend through a daily, weekly, monthly, or even one-minute period.

Sideways Market



Table1.5

A sideways market consists of relatively horizontal price movements that occur when the forces of supply and demand are nearly equal for some period of time. This typically occurs during a period of consolidation before the price continues a prior trend or reverses into a new trend..Sideways markets are generally the result of a price traveling between strong levels of support and resistance. It is not uncommon to see a horizontal trend dominate the price action of a specific asset for a prolonged period before starting a new trend higher or lower. These periods of consolidation are often needed during prolonged trends, as it is nearly impossible for such large price moves to sustain themselves over the longer term.

Break-out



Table 1.6

A breakout refers to when the price of an asset moves above a resistance area, or moves below a support area. Breakouts indicate the potential for the price to start trending in the breakout direction. For example, a breakout to the upside from a chart pattern could indicate the price will start trending higher. Breakouts that occur on high volume (relative to normal volume) show greater conviction which means the price is more likely to trend in that direction.

Break-out traders

A breakout trader is a type of trader that uses a breakout strategy. This strategy looks for levels support & resistance or areas that a security has been unable to move beyond, and waits for it to move beyond those levels (as it could keep moving in that direction). When a price moves beyond one of these levels, it is called a breakout.

CHAPTER 4

ANALYSIS AND DISCUSSION

Market Manipulation

A failed breakout is a fakeout, and in that one-side impulsive move traders get trapped for taking early buy/sell positions in the false assumption of breakout. By this big institutions takes an advantage & accumulate or distribute their orders.

Price Movement

In any transaction, there is a buyer and a seller and without both sides, a transaction cannot happen So prices going up is not a function of more buyers, but rather aggressive buyers (who are willing to pay more to buy something) and prices going down is not a function of more sellers, but rather aggressive sellers. At the end of the day, buyers and sellers are equal - as goods have just changed hands.

Liquidity

Liquidity generally refers to how easily or quickly a security can be bought or sold in a secondary market. Liquid investments can be sold readily and without paying a hefty fee to get money when it is needed. A stock's liquidity generally refers to how rapidly shares of a stock can be bought or sold without substantially impacting the stock price. Stocks with low liquidity may be difficult to sell and may cause you to take a bigger loss if you cannot sell the shares when you want to. Liquidity risk is the risk that investors won't find a market for their securities, which may prevent them from buying or selling when they want. This is sometimes the case with complicated investment products and products that charge a penalty for early withdrawal or liquidation. There are two types of liquidity such as buy-side liquidity and sell-side liquidity.

Buy-side liquidity



Table 1.7

Buy Side Liquidity any area where buy orders are residing (after a high breaks-out. Buy side liquidity is considered any build up that sits above a range or high where sellers stop losses (buy orders) and breakout trader's orders (buy stop limits) are sitting, ready to be run and to fuel a momentary or sustained bullish movement in price. This is considered liquidity to "target" or "fuel the move". Alternatively you can class targeted lows as BSL (buy side liquidity).

Sell-side Liquidity



Table 1.8

Sell side liquidity any area where sell orders are residing (after a low breaks-out). Sell side liquidity is considered any build up that sits below a range or low where buyers stop losses (sell orders) and breakout trader's orders (sell stop limits) are sitting, ready to be run and to fuel a momentary or sustained bearish movement in price. This is also considered liquidity to "target" or "fuel the move". Alternatively you can class targeted lows as SSL (sell side liquidity).

Liquidity Grabbing



Chart 1.9

Price will go from one area of liquidity to another area of liquidity Whether price has taken buy side liquidity or sell side liquidity usually determines. which direction it is intending to go in. Liquidity broadly means orders, and how easy it is to fill orders. Institutions have big orders to fill, either big buy orders or big sell orders. So when they want to buy big quantities, they will need to create panic so masses will sell - just so that their buy orders are filled (vice versa when they want to sell).

The institutional algorithm is always in the search of liquidity (opposing orders) of retail traders, so that institutional orders can be filled.

STOPHUNTS

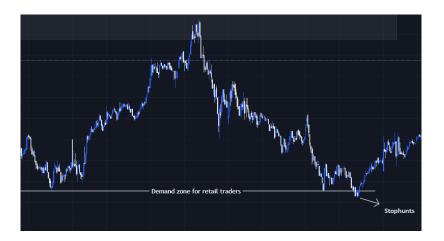


Chart 1.10

A stop-loss order is an automated instruction set by an individual with his/her broker to execute the sale of a security if the price falls below a certain level. It helps investors effectively manage their losses by capping it through the sale of stocks and bonds if the price drops below a certain level.

Stop loss orders represent liquidity in the markets. And the big players such as banks, big institutions, hedge funds, etc. need liquidity. Those big players cannot just enter a trade at once, but they slowly have to build a position by "hunting for liquidity".

Big players attempts to force market participants out of their positions by driving the price of an asset to a level where many have chosen to set their stop-loss orders

FRONT_RUNNING

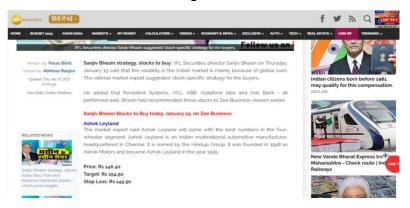




Chart 1.11

Front-running is trading stock or any other financial asset by a broker who has inside knowledge of a future transaction that is about to affect its price substantially. A broker may also front-run based on insider knowledge that their firm is about to issue a buy or sell recommendation to clients that will almost certainly affect the price of an asset. Front-running is illegal and unethical when a trader acts on inside information. A straightforward example of front-running occurs when a broker exploits market-moving knowledge that has not yet been made public. There are grey areas. An investor may buy or sell a stock and then publicize the reasoning behind it. Sources which are used to manipulate the public

- ✓ Website
- ✓ Social media
- ✓ Business news articles
- ✓ Financial influencers.

CAPTER 5

FINDINGS AND SUGGESTIONS

FINDINGS

The stock-price manipulation involved in massive buybacks and the resulting exorbitant executive pay are thus not just moral or legal problems. This consequences net disinvestment, loss of shareholder value, diminished investment in innovation, destruction of jobs, exploitation of workers, windfall gains for activist insiders, rapidly increasing inequality and sustained economic stagnation. The intentional deception by market participants in an attempt to misrepresent or alter market prices. This relates to stock market manipulation and financial manipulation in For example, an investor spreads false information that a company's stock is about to surge. He then proceeds and unloads all of his capital in the stock in order to create a spike, further signalling other investors to buy it, in light of this deception, the ultimate investment advice is to research and educate oneself about the companies one choose to invest in. An example of this is the attempt to spread false information or post fake orders, artificially inflating or deflating digital currency prices, which most countries have not yet developed laws around. Many traders equate their own losses to market manipulation. While this may sometimes be the case, often it is not.

The objective of manipulative conduct will normally be to make money either directly or through transactions, or by other means. Some examples of how this motive is achieved include:

- Influencing the price or value of a security or a derivative contract, so that the manipulator can:
 - o Buy at a lower price,
 - o Sell at a higher price,
 - o Influence takeover bids, or other large transactions, or
 - Combat competitive transactions.
- Influencing the impression of financial advice or placements.
- Influencing the price of a security underlying an index.
- Influencing the subscription price in public or non-public offerings.

Individual Traders' Participation in Equity F&O Segment

	All		Active		Non	-active		Active		
	Individu		Individual		Individual			Trimmed		
	al		Traders		Traders			Individual		
	Traders							Traders		
	FY19	FY22	FY19	FY22	FY19	FY22		FY19	FY22	
Total number										
of individual	7,06,75	45,24,84	6,17,65	39,76,41	89,105	5,48,42		5,55,88	35,78,77	
traders	7	1	2	9		2		6	7	
(sample)										
% of total	100%	100%	87%	88%	13%	12%		79%	79%	
% of Loss makers	85%	89%	87%	90%	76%	83%		91%	94%	
during the year										
% of Profit										
makers during	15%	11%	13%	10%	24%	17%		9%	6%	
the										
Year										

Table1.1

Active Individual traders: Individual traders who traded in equity F&O segment more than 5 times in a year Active Trimmed distribution excludes outliers from the group of active individual traders i.e. trimming of top 5 and bottom 5 percentile from the P&L distribution of all active individual traders.

Summary Statistics of P&L of Individual Traders in Equity F&O

	All Individual Traders		Active			Non-active		
				Individual Traders			Individual	
							Traders	
	FY19	FY22		FY19	FY22		FY19	FY22
Average P&L	-1,26,909	-82,536		-1,44,194	-93,357		-7,096	-4,075
Median P&L	-21,644	-15,872		-30,577	-21,769		-1,117	-663
25 percentile P&L	-96,557	-66,373		-1,17,602	-80,221		-4,786	-2,909
% of individual traders made loss	85%	89%		87%	90%		76%	83%
% of individual traders made profit	15%	11%		13%	10%		24%	17%
Average profit made by profit makers	1,46,791	1,51,997		1,81,919	1,86,399		10,927	6,221
Average loss made by loss makers	-1,73,646	-1,11,216		-1,94,020	-1,24,528		-12,730	-6,217
Average net trading profit made by profit	1,75,332	1,78,702		2,17,674	2,19,308		11,570	6,641
makers								
Average net trading loss made by loss makers	-1,38,958	-90,512		-1,55,019	-1,01,260		-12,098	-5,737

Table 1.2

Interpretation

- Individual traders in equity F&O segment incurred an average P&L of (-) Rs. 82,500 during FY22, down from average P&L of (-) Rs. 1.3 lakhs during FY19.
- The average P&L was even worse for active individual traders amounting (-) Rs.
 1.4 lakhs and (-) Rs. 93,000 during FY19 and FY22 respectively. However, the magnitude of P&L was significantly less for non-active individual traders during the same period.
- 89% of the individual traders (i.e. 9 out of 10 individual traders) in equity F&O segment incurred losses, with an average loss by loss makers of Rs. 1.1 lakh during FY22. Whereas, 90% of the active traders incurred losses with an average loss by loss makers at Rs. 1.25 lakh during the same period.
- During FY22, 11% of individual traders in equity F&O segment made profit with an average profit of Rs. 1.5 lakhs. The percentage of profit makers declined marginally to 10% for active traders, though the average profit made by them went up to Rs. 1.9 lakh

Suggestions

The stock markets play major roles in trading worldwide. The nature of these markets allows market manipulation and unfair strategies. It requires careful monitoring and assessment of markets to prevent any manipulations. According to a literature review, this paper studied, reviewed and listed the existing stock and power market indicators to monitor markets and detect false signals. At present, there are visible challenges to monitoring both the stock and power markets. Based on the comprehensive investigation, it is vital to develop clearer and more oriented data collection mechanisms and a monitoring system that can incorporate expert mechanisms and automatic learning.

Liquidity

- Taking liquidity within your trading plan is a big probability gainer. How often did you got that you your bias was on point, but you got stopped out by a wick? Also know as: stop hunt or liquidity grab. This happens systematically over and over again are the main reason as to why common retail trading methods(Traditional price action) such as trend lines, support/resistance and chart patterns (double tops/bottoms, head and shoulders, flags, wedges etc..) rarely work. If 95% of retail traders are utilizing these methods, then of course institutional algorithms will be programmed to purge stop losses surrounding these chart formations.
- ➤ So, trading based on buy side liquidity(BSL-where buyers get trapped) and sell side liquidity(SSL-where sellers get trapped) probably leads to profitable growth and helps to escape from trading traps .Taking liquidity within your trading plan is a big probability gainer.

Risk-Management

➤ Since trading is a business of probabilities, in that risk is an inevitable aspect. Managing the risk is what separates a profitable trader form a beginner. Risk management encompasses the identification, analysis, and response to risk factors that form part of the life of a business.

➤ Effective risk management means attempting to control, as much as possible, future outcomes by acting proactively rather than reactively. Therefore, effective risk management offers the potential to reduce both the possibility of a risk occurring and its potential impact.

Importance of Risk Management

- ➤ Proper Risk Management applies both to Investing and Trading, but it becomes of paramount importance if you are a trader. An investor has time on his side as he is able to wait patiently for the market to move in his direction. But if you are a trader, then you would ideally want the trade to move in your favor as soon as possible.
- A proper risk-management strategy is necessary to protect traders from catastrophic losses. This means determining your risk appetite, knowing your risk-reward ratio on every trade, and taking steps to protect yourself from a long-tail risk.

Risk to reward ratio

The risk-reward ratio is a mathematical calculation used by traders & investors to measure the expected gains of a given investment against the risk of loss.

- The risk/reward ratio marks the prospective reward an investor can earn for every dollar they risk on an investment. A lower risk/return ratio is often preferable as it signals less risk for an equivalent potential gain.
- ➤ Consider the following example: an investment with a risk-reward ratio of 1:7 suggests that an investor is willing to risk \$1, for the prospect of earning \$7. Alternatively, a risk/reward ratio of 1:3 signals that an investor should expect to invest \$1, for the prospect of earning \$3 on their investment

Risk-reward ratio(risk:reward)	1:2	1:3	1:5	1:10
Accuracy	60%	50%	40%	30%
Total trades	10	10	10	10
Winning/losing	6	5	4	3
trades	4	5	6	7
Profit/loss	12	15	20	30
	4	5	6	7
Net profit	8	10	14	23

Table1.3

This above table clearly shows that a trader will be highly profitable by taking 1:10 as risk to reward ratio on his/her trades even with a low accuracy rate.

CONCLUSION

The only way to step out and not to get manipulated is not to follow what the 95% of retailers are doing. Trading is a zero-sum game which means your profit is another individual's loss and your loss is another one's profit. So, if 95% of traders are constantly losing then the 5% is owning their money. Those 5% of traders take exact opposite position of 95% of traders. The core concept of manipulation in market is....market move from one place to another in search of liquidity. Now liquidity is created through orders which are placed by the market participants. Most of the Contents on the Internet don't explain the concept of Trapped Traders clearly. The belief that only retail traders get trapped in the market is not true. If you logically think about it, even Institutions and big players can get trapped in the Market.

Of course, most of the Retail traders get caught in the whipsaws and sudden changes on the price, but big players are not exception to it. Even a Multi-million dollar Investment firm, despite all its cutting edge research can end up taking a wrong trade and get trapped. That's the reason many give importance to Risk management rather than relying only on strategy .Hedge funds have been manipulating the stock market for decades .But it wasn't until now that a community has risen to raise awareness of market injustices.

Just don't try and compete with big money machine, the big funds, the Hedge funds & the institutional traders because they have a lot on insider Information what do I mean by that is for example, these people have got microsecond low-latency connectivity, they definitely know the news before you do know even the news is being released at some instant they actually know it before you do they already priced date in and they already made their profits and you can't compete with that .So, just avoid trying to compete with things the areas in which you got no chance of doing better then. There are Areas where there are no advantage over you and why not to go for that you know the difference really on the level playing field.

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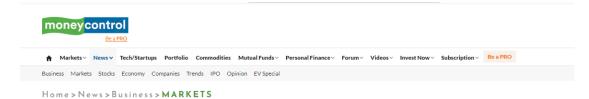
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APPENDIX



Nine out of 10 equity F&O traders lose money, 84% of them are men, 75% under 40: SEBI study

Between FY19 and FY22, retail investors have been waking up to the immense risk, that is implicit futures trading. This is evidenced by the dramatic fall in individual traders' participation in the futures segment, which was at 43% in FY19 but fell to 11% in FY22. In the same time frame, participation in Options rose to 98% from 89%.