
A STUDY ON CASH FLOW MANAGEMENT TECHNIQUES

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ABSTRACT:

There are multile technical analysis tools available for security analysis such as MACD,RSI, MFI,ADX and candle stick pattern etc. but still investors or traders are confused about accuracy of indicators and pattern. This research focuses to test accuracy of signals given by MFI indicator and also compared to the percentage of correctness towards buy and sell signals. This research considered secondary data of twelve banks during the period of Apr 2022 to June 2022 in which all the selected banks are from “bank nifty index”. In the study it has been measured that the signals given by MFI indicator were not significant and there is significant difference in correctness of Buy signals and Sell signals as per MFI indicator. It is also observed that MFI indicator provide more sell signals as compare to buy signals. Hence, it can be concluded that the use of only MFI indicator will not be appropriate for the investor for decision making but this indicator would be more useful for selling decision rather than buying decision.

INTRODUCTION

The Money Flow Index (MFI) is an oscillator that utilizes both cost and volume to quantify purchasing and selling pressure. MFI is otherwise called volume-weighted RSI. MFI begins with the common cost for every period. Money flow is certain when the normal value rises (purchasing weight) and negative when the run of the mill value

decreases (selling pressure). A proportion of positive and negative money flow is then connected to an RSI recipe to make an oscillator that moves somewhere in the range of zero and one hundred. As an energy oscillator attached to volume, MFI is most appropriate to recognize inversions and value limits with an assortment of signs.

To begin with, notice that Raw Money Flow is dollar volume because the recipe is volume increased by the commonplace cost. Crude Money Flow is sure when the ordinary value propels starting with one period then onto the next and negative when the commonplace value decreases. The Raw Money Flow esteems are not utilized when the run of the mill cost is unaltered. The Money Flow Ratio in stage 3 structures the reason for the Money Flow Index. Positive and Negative Money Flow is added for the think back period (14) and the Positive Money Flow whole is separated by the Negative Money Flow aggregate to make the proportion. The RSI equation is then applied to make a volume-weighted marker. The table underneath shows a computation model taken from an Excel spreadsheet.

NEED FOR THE STUDY

Investment decision relates to the decision made by the investor to amount of funds to be deployed in investment opportunities. The investor has various investment alternatives to invest his/her money in the forms of share, bonds, debentures, etc. Investors mainly rely on returns with minimum risk.

This study mainly used to spot divergences that warn a trend change in prices using technical analysis.

SCOPE OF THE STUDY

The scope of the study is limited to price fluctuations of selected companies such as HDFC Bank, Canara bank, Bank of India, Andhra Bank, South India Bank in Indian stock market using technical analysis.

OBJECTIVES OF THE STUDY

1. To understand the concept of money flow indices using technical analysis
2. To analysis price fluctuations of various stocks using technical analysis
3. To aware the investors about the price movements of stock

RESEARCH METHODOLOGY

Accounting methods: calculations of typical price, raw money flow, money flow ratio, money flow index

Data Collection Method: Secondary data has been used for the study, collection from various magazines, publications, journals, book and reports of various associations connected to the company. Wherever possible, facts and graphical diagrams have been used. Such data has been interpreted and suggestions and conclusions have given.

TOOLS USED:

Typical Price = $((\text{Day High} + \text{Day Low} + \text{Day close})/3)$

Money Flow = $(\text{Typical price}) \times (\text{volume})$

Money Ratio = $(\text{Positive Money Flow} / \text{Negative Money Flow})$

Money Flow Index = $100 - (100) - (100 / 1 + \text{Money Ratio})$

LIMITATIONS OF THE STUDY

- ❖ The present study is limited to a period of 45days
- ❖ The present study covers the data collected from secondary sources only.

2.REVIEW OF LITERATURE

Cooter (1962) found that the stock prices move at random when studied at one week interval. The data for his study was week-end prices of forty five stocks from New York stock exchange. He tested randomness of share by means of a mean square successive difference test. He concluded that there was not one random walk model. He concluded that the share price trends could be predicted when studied at fourteen-week interval. But in total the stock prices followed a random walk at weekly intervals.

Eugene **F.Fama** (1965) has answered the questions to what extend can the past history of a common stock price can be used to make meaningful predictions concerning the future prices of the stock? The theory of random walk on stock prices is studied with two hypotheses. They are **i)** Successive price changes are independent and **ii)** The price changes conform to some probability distribution. The data for this study consists of daily prices for each of the thirty stocks of the Dow –Jones industrial average. This study concludes that there is strong and voluminous evidence in favor of random walk theory.

Ramaswami.K (1996) assessed the relationship among book values, earnings, dividend and market price of share, impact of bonus issues, impact of security scam on equity return .to that end, the author used daily share price of 30 companies included in the construction of BSE sensitive index, daily data of BSEI and NYSE composite index, annual data on BV per share market price per share, EPS and

DPS and data on bonus issue made ,during the period of study ,the researcher used correlation ,regression and frequency distribution for interpreting data.

Sharma and Robert E. Kennedy (1977) tested the applicability of random walk hypothesis to the stock market in developing country namely India and compare this to that of stock markets in developed countries namely USA, and England. For this purpose the price behavior of Bombay stock exchange is statistically examined both for randomness and independence .The test the random walk hypothesis. The test covers 132 monthly observations for each stock market index of common stock listed in Bombay exchange for eleven years from 1968-1973.The study indicates that price dependence while statistically significant, is comparably small in the developing countries. Based on the test, it is evident that the Bombay stock exchange stock obeys a random walk and is equivalent to developed countries stock exchange.

Fernando Fernandez –Rodriguez, Simon Sosvilla –Rivero, Julian Andrade –Felix (1999) assessed whether some simple forms of technical analysis can predict stock price movement in the Madrid stock exchange, covering thirty-one-year period from Jan 1966 –Oct 1997.the results provide strong support for profitability of those technical trading rules. By making use of bootstrap techniques the author shows the returns obtained from these trading rules are not consistent with several null models frequently used in finance.

C. L. Osler (2001) provides a micro structural explanation for the success of two familiar predictions from technical analysis: (1) trends tend to be reversed at predictable support and resistance levels, and (2) trends gain momentum once predictable support and resistance levels are crossed. The explanation is based on a close examination of stop-loss and take-profit orders at a large foreign exchange dealing bank. Take-profit orders tend to reflect price trends and stop-loss Technical Analysis on Selected Stocks of Energy Sector orders tend to intensify trends. The requested execution rates of these orders are strongly clustered at round numbers, which are often used as support and resistance levels. Significantly, there are marked differences between the clustering patterns of stop-loss and take-profit

orders, and between the patterns of stop-loss buy and stop-loss sell orders. These differences explain the success of the two predictions.

Gupta, (2003) examined the perceptions about the main sources of his worries concerning the stock market. A sample comprise of middle-class household's spread over 21 states/union territories. The study reveals that the foremost cause of worry for household investors is fraudulent company management and in the second place is too much volatility and in the third place is too much price manipulation.

Ravindra and Wang (2006) examine the relationship of trading volume to stock indices in Asian markets. Stock market indices from six developing markets in Asia are analyzed over the 34 month period ending in October 2005. In the South Korean market, the causality extends from the stock indices to trading volume while the causality is the opposite in the Taiwanese market. **Price Patterns**

3.1 INDUSTRY PROFILE

HISTORY OF STOCK EXCHANGE

The only stock exchanges operating in the 19th century were those of Bombay set up in 1875 and Ahmadabad set up in 1894. These were organized as voluntary non profit-making association of brokers to regulate and protect their interests. Before the control on securities trading became central subject under the constitution in 1950, it was a state subject and the Bombay securities contracts (control) Act of 1925 used to regulate trading in securities. Under this act, the Bombay stock exchange was recognized in 1927 and Ahmadabad in 1937. During the war boom, a number of stock exchanges were organized in Bombay, Ahmadabad and other centers, but they were not recognized. Soon after it became a central subject, central legislation was proposed and a committee headed by

A.D. Gorwala went into the bill for securities regulation. On the basis of the committee's recommendations and public discussion, the securities contracts (regulation) Act became law in 1956.

"Stock exchange means anybody or individuals whether incorporated or not, constituted for the purpose of assisting, regulating or controlling the business of buying, selling or dealing in securities".

It is an association of member brokers for the purpose of self-regulation and protecting the interests of its members. It can operate only if it is recognized by the Government under the securities contracts (regulation) Act, 1956. The recognition is granted under section 3 of the Act by the central government, Ministry of Finance.

BOMBAY STOCK EXCHANGE

This stock exchange, Mumbai, popularly known as “BSE” was established in 1875 as “The Native share and stock brokers association”, as a voluntary non-profit making association. It has evolved over the years into its present status as the premiere stock exchange in the country. It may be noted that the stock exchange is the oldest one in Asia, even older than the Tokyo stock exchange, which was founded in 1878. The exchange, while providing an efficient and transparent market for trading in securities, upholds the interests of the investors and ensures redress of their grievances, whether against the companies or its own member brokers. It also strives to educate and enlighten the investors by making available necessary informative inputs and conducting investor education programs. A governing board comprising of 9 elected directors, 2 SEBI nominees, 7 public representatives and an executive director is the apex body, which decides the policies and regulates the affairs of the exchange. The Exchange director as the chief executive officer is responsible for the daily administration of the exchange.

NATIONAL STOCK EXCHANGE

The NSE was incorporated in Nov, 1992 with an equity capital of Rs.25 crs. The international securities consultancy (ISC) of Hong Kong has helped in setting up NSE. ISC has prepared the detailed business plans and initialization of hardware and software systems. The promoters for NSE were financial institutions, insurances, companies, banks and SEBI capital market ltd, Infrastructure leasing and financial services ltd and stock holding corporations ltd. It has been set up to strengthen the move towards professionalization of the capital market as well as provide nationwide securities trading facilities to investors. NSE is not an exchange in the traditional sense where brokers own and manage the exchange. A two tier administrative set up involving a company board and a governing

aboard of the exchange is envisaged. NSE is a national market for shares PSU bonds, debentures and government securities since infrastructure and trading facilities are provided.

3.2 COMPANY PROFILE

SBI direct Centre for Financial Learning (SBICL) is an educational initiative of SBI Securities Limited. We strive to offer best in the class financial learning programmes, through one of the most superior and practical learning approaches that would help students and professionals reach their career goals and investors and traders build expertise to invest and trade.

With an objective to be one of the most preferred provider for education on Finance, we offer premium education programmes ranging from Investor and Trader focused skill enhancement programmes on Stock investing, Technical Analysis and Derivatives Trading to certification programmes on Financial Planning and Wealth Management.

We are an Authorised Education Partner of Financial Planning Corporation (India) Pvt. Ltd. (FPCIL) to offer Certified Financial Planner^{CM} certification in India.

We have partnered with American Academy of Financial Management India (AAFM India.) to offer Chartered Wealth Management[®] - CWM[®] certification to working professionals, college students and IA's / IFA's with a unique value proposition which only an Industry practitioner can offer- Internships with Wealth Management teams and learning from practicing Wealth Managers.

bullet Trading in shares : SBIdirect.com offers you various options while trading in shares
bullet Cash Trading : This is a delivery based trading system, which is generally done with the intention of taking delivery of shares or monies
bullet Margin Product : You can also do an intra-settlement trading upto 3 to 4 times your available funds, wherein you take long buy/ short sell positions in stocks with the intention of squaring off the position within the same day settlement cycle
bullet MarginPLUS Product : Through MarginPLUS you can do an intra-settlement trading upto 25 times your available funds, wherein you take long buy/ short sell positions in stocks with the intention of squaring off the position within the same day settlement cycle. MarginPLUS will give a much higher leverage in your account against your limits
bullet CallNTrade[®] : CallNTrade[®] allows you to call on a local number in your city &

trade on the telephone through our Customer Service Executives. This facility is currently available in over 11 major states across India bullet Trading on NSE/BSE : Through SBIdirect.com, you can trade on NSE as well as BSE bullet Market Order : You could trade by placing market orders during market hours that allows you to trade at the best obtainable price in the market at the time of execution of the order bullet Limit Order : Allows you to place a buy/sell order at a price defined by you. The execution can happen at a price more favorable than the price, which is defined by you, limit orders can be placed by you during holidays & non market hours too

4.DATA ANALYSIS AND INTERPRETATION

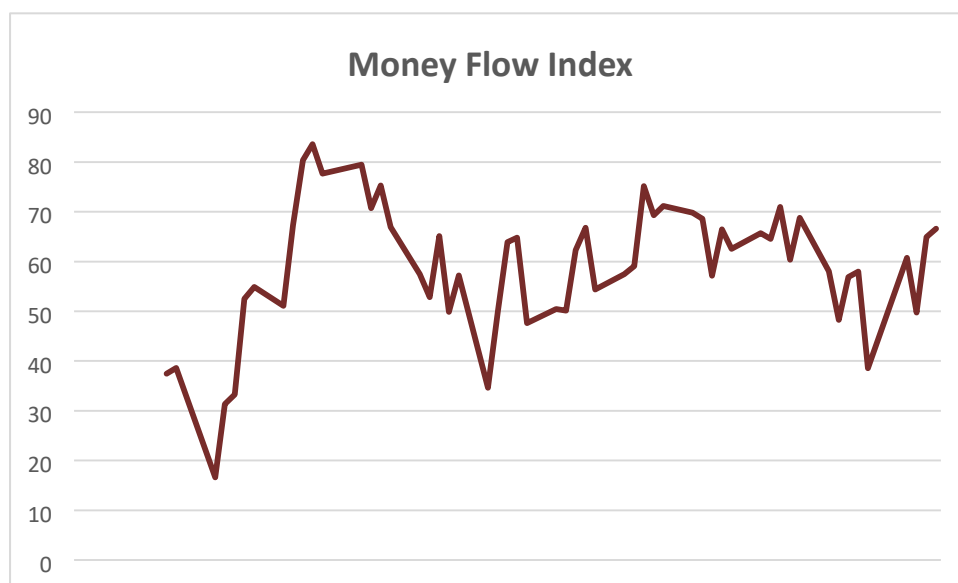
Statement showing calculation of MFI of HDFC BANK From 01.04.2022 to 30.06.2022

Date	High Price	Low Price	Close Price	Volume	Typical price	Raw money flow	Money ratio	Money flow index
3-Apr-22	1537.2	1502.05	1533.65	2302442	1524.3	3509612341		
5-Apr-22	1530	1486.75	1490.15	4839266	1502.3	7270029312		
6-Apr-22	1490	1468.1	1482.6	3533800	1480.233333	5230848553		
7-Apr-22	1494	1466.25	1484.75	2366116	1481.666667	3505795227		
10-Apr-22	1484	1465.05	1467.5	2200153	1472.183333	3239028577		
11-Apr-22	1486.95	1461.2	1476.85	2266322	1475	3195322000		
12-Apr-22	1476.45	1460	1466.65	2663565	1467.7	3909314351	0.5984465	37.43926
13-Apr-22	1484.7	1461.15	1474.9	2273012	1473.583333	2612680933	0.62862954	38.59868
22-Apr-22	1494.45	1474.8	1479.55	1223004	1482.933333	2298804065	0.19963327	16.64119
18-Apr-22	1491	1474	1480.05	2284505	1481.683333	2644071322	0.45663004	31.34839
19-Apr-22	1492.3	1470.2	1490.2	1546962	1484.233333	2296052566	0.49866394	33.2739
22-Apr-22	1531.75	1487.1	1522.1	2905255	1511.983333	4392697139	1.10534566	52.50186
22-Apr-22	1526.75	1490.95	1507.45	1520049	1508.383333	2292816577	1.22618357	54.87738
24-Apr-22	1538.55	1507.45	1530.7	1550370	1525.566667	2365192793	1.04462026	51.09119
25-Apr-22	1557.6	1531	1548.4	2420240	1545.666667	3740884293	2.05753255	67.29389
26-Apr-22	1590	1551.2	1586	3596629	1575.733333	5667328223	4.09908698	80.38865
27-Apr-22	1589.95	1559.05	1566.5	4533632	1571.833333	7126113899	5.07580748	83.54128

28-Apr-22	1566	1532.15	1537.15	2850999	1545.1	4405078555	3.4775427	77.66632
2-May-22	1590.75	1538.9	1584.75	4472856	1571.466667	7028944109	3.87113605	79.47091
3-May-22	1591.85	1563	1571.3	4028393	1575.383333	6346263192	2.41164907	70.68866
4-May-22	1587.4	1556	1564.35	5810079	1569.25	9122466471	3.03968916	75.24562
5-May-22	1570.2	1540.95	1546.85	2299986	1552.666667	3571111596	2.02259326	66.89392
8-May-22	1549	1527.15	1529.5	1887869	1535.226667	2898287953	1.35142408	57.47258
9-May-22	1542.8	1522.85	1523.5	2241977	1528.05	3120242955	1.11880512	52.80359
10-May-22	1575.25	1527.2	1572	2965910	1558.15	4622332667	1.86396807	65.08341
11-May-22	1581	1557	1565.3	2648011	1567.766667	4151463379	0.9936298	49.84024
12-May-22	1566.2	1539.35	1549.8	1294006	1551.783333	2008016944	1.33495942	57.2027
15-May-22	1572.6	1554.1	1559.5	1270297	1562.066667	1984288600	0.52976708	34.63057
16-May-22	1569	1554	1566.55	2014918	1563.183333	3306004569	1.00050022	50.0125
22-May-22	1570.95	1549.75	1552.5	2261434	1557.733333	3366937790	1.77000577	63.89899
18-May-22	1558.6	1526.5	1537.05	2404372	1540.716667	3704456013	1.8422432	64.81033
19-May-22	1548	1515.35	1522.6	2242433	1527.983333	3273601922	0.90891314	47.61422
22-May-22	1530	1510.25	1519.85	1922867	1522.033333	2919781869	1.01882241	50.46615
23-May-22	1537.2	1503.45	1511.5	1408855	1522.383333	2237773096	1.00600584	50.1497
24-May-22	1541.75	1512.4	1524.85	2229471	1526.333333	3372389236	1.65040556	62.26993
25-May-22	1546	1530.5	1539.75	4099792	1538.75	6308554940	2.01080573	66.7863
26-May-22	1563	1530.25	1547.9	1871008	1547.05	2894542926	1.19238893	54.38766
29-May-22	1601.25	1546	1598.85	3464406	1582.033333	5480805772	1.35062849	57.45819
30-May-22	1604	1575.05	1579.5	1605201	1586.183333	2546158935	1.44422595	59.08708
31-May-22	1596.15	1565.4	1569.85	4907685	1577.133333	7740073603	3.02295675	75.13648
1-Jun-22	1587.4	1551.8	1583.75	2990228	1574.316667	4707565778	2.25672246	69.29428
2-Jun-22	1612.8	1582	1604.65	3427957	1599.816667	5484102741	2.46480857	71.13838
5-Jun-22	1612	1591.15	1606.15	2988075	1603.1	4790183033	2.31518974	69.83581
6-Jun-22	1624.85	1602.5	1605.75	2200922	1611.033333	3497424484	2.18536314	68.60641
7-Jun-22	1611.5	1590.6	1599.35	2026464	1600.483333	2763226858	1.33298244	57.13641
8-Jun-22	1635	1605	1633.55	2289492	1624.516667	3719322912	1.98152322	66.4601
9-Jun-22	1649	1622.1	1647.2	2633241	1638.766667	4315267576	1.66927355	62.53662
12-Jun-22	1651.8	1633.85	1647.5	2000556	1644.383333	3289680944	1.92010263	65.71941
13-Jun-22	1682.2	1642.05	1667.65	2737084	1663.966667	4554416540	1.81975616	64.53594
14-Jun-22	1668	1644	1651.1	6519614	1654.366667	10785832281	2.44755426	70.99393
15-Jun-22	1653.7	1629.55	1636.85	5678766	1640.033333	9313365532	1.52018277	60.33608
16-Jun-22	1651	1629.15	1640.85	2692532	1640.333333	4416649991	2.22514022	68.80012

19-Jun-22	1660	1645.2	1654.2	2907637	1653.133333	4806711646	1.3826824	58.0305
22-Jun-22	1660	1627.9	1631.5	2304515	1639.8	3778943697	0.9324261	48.25158
22-Jun-22	1638	1615.5	1628.25	2359678	1627.25	3839786026	1.31832265	56.86537
22-Jun-22	1660	1626.1	1653.8	3438975	1646.633333	5662730868	1.38024304	57.98748
23-Jun-22	1661	1642.1	1651.35	2590704	1651.483333	4278504478	0.62762489	38.56078
27-Jun-22	1667	1639.7	1651.05	3612290	1652.583333	5969610249	1.5460611	60.72364
28-Jun-22	1658.8	1623.1	1629	1683069	1636.966667	2755127851	0.99057828	49.76334
29-Jun-22	1654.9	1622.1	1632.2	2783222	1635.733333	4552605728	1.85198539	64.93671
30-Jun-22	1625	1606.95	1614.95	1866235	1615.633333	3015151474	1.99275189	66.58594

Graphical Presentation:



Interpretation:

The above table shows the calculation of Money flow index of HDFC Bank for the period of 1st April 2022 to 30th June 2022. The highest money flow index is 83.5412 on 27.04.2022 and lowest money flow index is 16.6411 on 03.06.2022.

5.1 FINDINGS:

1. The present project work to undertaken to study the process of reference to money flow index during analysis the following facts have been identified. The money flow index of the HDFC Bank has the highest positive value in this bank 83.5412 and the lowest positive value 16.6411 has several buys and several sell signals.
2. The present project work to undertaken to study the process of with reference to money flow index during analysis the following facts have been identified. The firm Canara Bank has several buys and several sell signals where the highest positive money flow is 75.9810 on and lowest negative money flow is 8.7093.
3. The present project work to undertaken to study the process of with reference to money flow index during analysis the following facts have been identified The firm Bank Of India has several buys and several sell signals where the highest Positive money flow is 79.6588 and lowest negative money flow is 11.2623.
4. The present project work to undertaken to study the process of with reference to money flow index during analysis the following facts have been identified. The firm Andhra Bank has several buys and several sell signals where the highest positive money flow is 87.3469 and lowest negative money flow is 24.4891.
5. The present project work to undertaken to study the process of technical analysis with reference to money flow index during analysis the following facts have been identified The firm Reliance Company has several buys and several sell signals where the highest positive money flow is 79.8596 and lowest negative money flow is 22.0196.

5.2 SUGGESTIONS:

Based on the analysis and findings from the study the investors can be given the following suggestions

- According to money flow indices based on banking sector stocks, the following money flow are good to invest; Canara Bank and Bank Of India. Though the money flow indices has highest positive value Andhra Bank and lowest positive value Canara Bank. The both bank money flows are increased as well as the decreased. Hence it is better if the investor invest in this sector.
- For all the 5 bank sector stocks the money ratio and money flow index use to know the which bank stocks has to give the most of high positive value to sell and the low positive value several to buy the stocks.
- Unlike the basic analysis, which looks at balance sheets and other financial data over a period of time, the technical analysis focuses on no more than a month and sometimes as short as a few minutes. visual recognition values in which prices are straightforward, looking at each variable. Trends are categorized by type and duration:

5.3 CONCLUSION:

- For decades, cash flow indicators based on banking sector shares were the only investment method offered for fidelity. That has changed as the advent of high-speed computers has made it easier and more widely available. Many large investment firms use black box trading, or computer modeling, to find their own entry and exit points.
- That means that most market players make their trading decisions based on computer algorithms. In fact, some estimate that computer trading is up to 70% of the volume

on the exchange today. Like it or not, your investment depends on the cash flow factors as the most important ones. Markets have changed, and we need to change our strategies as well.

- The best way to invest is to include some combination of basic indicators and cash flows. I like to choose stocks or securities with strong foundations and use cash flow indices according to the stocks of the banking sector to help me decide when to buy or sell them. Comparison of different money flow sector stocks can be made by using individual money ratio and money flow index to make a wise decision before investing any bank sector. By using money flow efficient money flow index are identified. Whose money flow higher than the expected bank sector stocks.

BIBLIOGRAPHY

1. Partha Roy, Sanjay Sharma and M. K. Kowar “*Candlestick Approach to Trade S&P CNX NIFTY 50 Index using Engulfing Patterns*” International Journal of Hybrid Information Technology Vol. 5, No. 3, July, 2012.
2. George Joseph, Saranya G Das, Amrudha Romeo “*A Study on the Formation of Candlestick Patterns with reference to Nifty Index*” IJMRR/Feb 2015/ Volume 5/Issue 2/Article No-3/67-90 Amrudha Romeo et al/ International Journal of Management Research & Review.

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3. [Piyapas Tharavanij](#), [Vasan Siraprapasiri](#), [Kittichai Rajchamaha](#) “A Study on Profitability of Candlestick charting Pattern in Stock exchange” Volume: 7 issue: 4, Issue published: October 1, 2017.
 4. Nikhil Kaushik, Dr. Madhur Raj Jain “*A study on Technical Analysis Japanese Candlestick chart*” Volume: 9 issue: 3, February, 2015.
 5. Pushpa BV, Sumithra C.G, Madhuri Hegde “*A study on both Fundamental and Technical Analysis*” Vol. 2, issue: 7, August, 2017.

WEBSITES:

www.nseindia.com www.moneycontrol.com

www.SBIdirect.com