

A STUDY ON STOCK SELECTION BASED ON TECHNICAL ANALYSIS

SHREENATH, MBA student, School of Business Administration, Sathyabama Institute of Science And Technology, Chennai, India

VELUMONI.D, Assistant Professor, School of Business Administration, Sathyabama Institute of Science And Technology, Chennai, India

ABSTRACT

Stock market is a place used for buying and selling of commodity to be exchanged for money or some other commodity. The Indian Stock Exchange Market Has Experiencing a rapid Growth In Recent Years. The Indian Stock Market Is One Of The Fastest Growing Stock Market In The World. The Indian securities market has become one of the most emerging and efficient securities market in asia today .When The Stock Market Is Booming in the peak The People Are Interested In Investing In The Stocks, But The Main Concern arises is Lack Of Knowledge About The Stocks and the market In The Common Man And Also About The Company In Which To Invest. So Here A Question Arise, How Investors Should Assess Risk and reward In The Stocks when They Buy Or Sell.

The Purpose Of This Project Is To Study How Should Investors Asses Risk and reward In The Stock They Buy And Sell. As We Can Imagine, The Concept Of Risk Is Hard To Pin Down And Factor Into Stock Analysis And Valuation. The Most Popular Indicators Of Risk Is A Statistical Measure Called Beta, which measures the risk of the stock. The input data required for the calculation of beta are the historical data of return of the individual securities as well as representative Stock market index. Two statistical methods can be used for the calculation of beta .1.corelation method 2.regression method. Analysts Use This Measure To Get A Sense Of Stocks' and the Profiles which are associated with risk appetite. Here We shower Some Light On What The Measure of beta Means For Investors. While Beta Does Say Something About Price Risk, It Does Have Its Limits For Investors Looking For Fundamental Risk And Return Factors.

KEYWORDS: Technical Analysis, Trading, Share Market, Financial Market, NSE.

1. INTRODUCTION

An Investor are People Who Invest Their Savings. Investment Is An commitment of a person's fund to derive future income in the form of interest ,dividend ,premium ,pension benefits or appreciation in the value of their capital, Which Is totally Different From Savings. Savings Are Generated When A Person saves From Present Consumption For A Future Use. Savings Kept As a Cash Are useless And Do Not Earn Anything. Hence, The Saver Has To Find A Temporary way For His Saving Until They Are Required For His Future. This Results In Investment. This Is An Era In Which The Investors Or Public Are Thinking Of Changing Their Investments From Bank Deposit To Share Market. They Got Better Return From The Investment In Capital Market Than In Case Of Bank Deposit. Today, Investment" Has Become A Very Popular With People From All Lifestyles of people even a small family starts to invest with small amount of fund for (eg..chit funds). It Is Because Of Increase In Working Population in family, Higher Family Incomes automatically it Saves the income and Availability Of Large And Attractive Investment Alternatives, Increase In Investment Related Publicity And So On.

It may mean many things to many person ,if one person has advanced some money to another, he consider his loan as investment as it give some returns along with his loan amount and another person may have purchased one kg of gold for the purpose of price appreciation and he consider this as his investment.

Today Investment Is A Word for many. A Person Has Advanced Some Money To Other; He May Consider His Loan As An Investment. He Expects To Get Back The Principle Along With Interest At A Future Date. Another Person May Have Purchased A plot For The Purpose Of Price Appreciation And May Consider It Is An Investment. In The Above Cases, It Can Be Seen That Investment Involves Of Money With An Aim Of Achieving Additional Income Or Growth In Values. Thus, Investment May Be Defined As, “A Commitment Of Funds Made In The view Of Some Positive Rate Of Return”. In future.The Capital Market Is A Sub System Of The Financial System .The Capital Market Is A Market For Long-Term Funds- Shares, Debentures And Bonds. Today The Indian Capital Market Offers A Variety Of Financial Products With Varied Features And Benefits, For Investors To Choose From Them. . Investing In Stock Is Most Popular Method Of Investment. However, The Knowledge About A Particular Investment Alternative Is An Essential For The Investor. The objective of investors can be stated as 1.maximization of return 2.minimization of risk 3.hedge against inflation.

Research Objective

The Main Objective Is Stock Selection On Technical Analysis Of Top 5 Companies Traded In NSE India

2.REVIEW OF LITERATURE

Cootner (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.

Cooter (2009) discovered that stock rates be in motion accidentally when considered in a one-week gap. The data for its study was the end week prices of forty-five shares of the New York Stock Exchange. He proved the uncertainty of participation through the successive square dissimilarity test. He got that there was no sudden walk model. He feels that trends in stock cost could be predicted when premeditated at 14-week intervals. But in entire the stock prices keeping random actions at weekly intervals.

Dietze, Oliver and Macro (2010) in their research work to assess the risk-adjusted return of mutual funds in corporate ,s classified in Europe. The funds were evaluated on the basis of a single index and several models of multiple indices and asset classes. The results specify that the corporate , funds, on average, have a low performance in the reference portfolios and that there was not a particular fund that revealed a transcendental activist performance. The results also indicate that the risk-adjusted return of larger and larger funds, and a poorer charge for funds was higher 33.

Cory Janssen, Chad Langager and Casey Murphy (2014) in their technical analysis of the research article are a system of evaluating standards by analyzes information moving up by market action, such as prices and past volume. Technical analysts do not to effort to calculate security and intrinsic value, but use graph and additional tools to recognize patterns that suggest future actions.

Edwards, Magee and Bassetti" (2016) in their technical analysis of research refers to the study of market achievement as something divergent from the study of the goods in which the market deals. Technical Analysis is the science of recording, usually explicitly, the definitive history of changes in the negotiation price, the volume of dealings, etc., in a given action or in the averages and then deduce from that the past the potential future trend.

3. RESEARCH METHODOLOGY

➤ Research Design

A research design is the arrangement conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. The research design used for the study is analytical in nature.

➤ Sampling Design

Sampling method

The researcher has used his own judgment and discretion in selecting the companies from each industry, which represents the population, this type of sampling is known as judgment sampling.

Sample size: top 5 companies traded in nse india are taken as samples for this study

Top 5 Companies Taken For Study (Nifty 50):

- Hdfc Bank (Hdfcbank)
- Reliance Industries (Reliance)
- Oil And Natural Gas Corporation (Ongc)
- Infosys (Infy)
- Tata Motors (Tata Motors)

- **Study Period:** stocks required for the analysis in the research are taken from february 2016-december 2020

➤ Source of data

All the data are collected from internet sources articles, books and journals. All the data were collected from already available websites, so the data is secondary in nature.

➤ Data collection Method

The research will be done by collecting secondary data's from respective company's website and from the annual reports published by the companies, analyst reports, and broking firm estimates. In addition, primary data would be gathered from share brokers, company executive, industry expert, financial analyst and investors

➤ TOOLS USED FOR ANALYSIS:

MACD

Developed by Gerald Appel in the late seventies, the Moving Average Convergence/Divergence oscillator (MACD) that measures the convergence and divergence between two exponential moving average. a short term exponential moving average and a long term moving average exponential moving average are calculated with the help of the closing price data.

MACD Line: (12-day EMA - 26-day EMA)

Signal Line: 9-day EMA of MACD Line

A 12 day and 48 day exponential moving average constitute a popular combination. The difference between short and long term EMA represents MACD.

4.DATA ALYSIS AND INTERPRETATION

Among Top 10 Blue chip companies in India, this report focuses on five from different sectors are listed below,

- HDFC Bank – Banking and Financial Sector
- Reliance Industries Fast Moving Consumer Durable Goods Sector
- Oil and Natural Gas Corporation – Energy Sector
- Infosys – Information Technology Services
- Tata Motors – Automobile sector

TABLE 1 SHOWING PRICES OF 5 STOCK SELECTED FOR STUDY

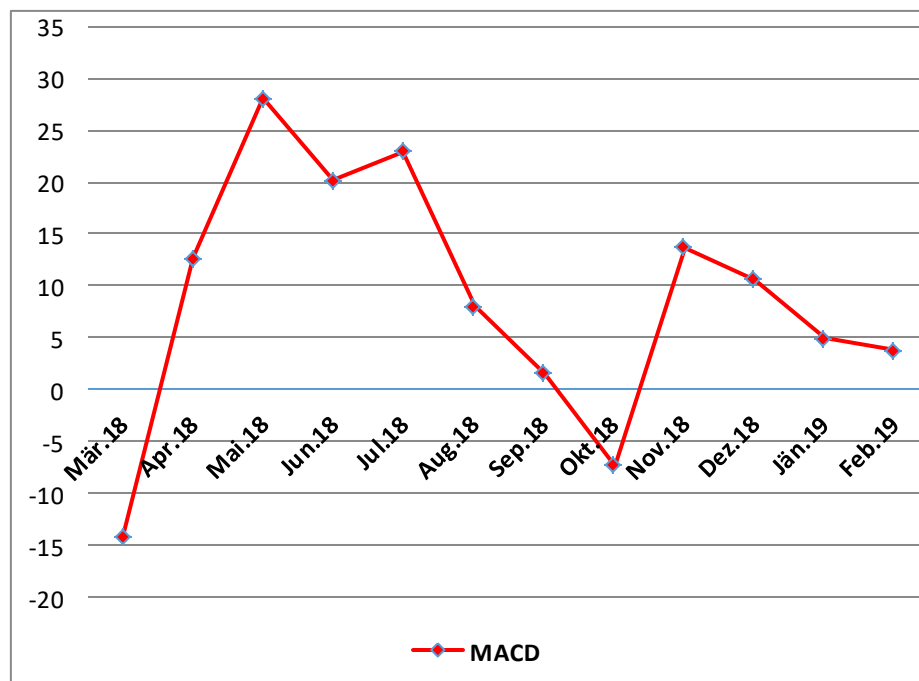
S.No	Date	price of hdfc	price of ril	price of ongc	price infy	price of tata motors
1	Feb-16	484.85	478.79	129.4	534.83	299.7
2	Mar-16	534.39	517.69	142.73	601.07	386.6
3	Apr-16	564.92	486.74	144.83	596.03	408.35
4	May-16	589.64	474.43	140.5	616.04	459.65
5	Jun-16	586.92	480.02	144.2	577.63	459.25
6	Jul-16	621.72	502.69	146.73	529.8	503.2
7	Aug-16	644.17	525.02	157.53	511.05	537.7
8	Sep-16	635.01	536.76	171.1	511.15	534.85
9	Oct-16	625.26	520.66	192.8	494.4	531.95
10	Nov-16	598.47	490.38	192.6	481.3	459.3

11	Dec-16	601.76	536.12	191.35	498.6	472
12	Jan-17	641.9	517.69	202.55	458.14	523.55
13	Feb-17	693.51	613.21	193.55	499.48	456.75
14	Mar-17	719.67	654.25	185	504.34	465.85
15	Apr-17	771.53	691.05	186.55	453.38	458.9
16	May-17	816.28	664.06	177	482.04	476.15
17	Jun-17	824.19	683.52	157.3	461.57	432.55
18	Jul-17	890.22	800.02	169.4	498.89	444.6
19	Aug-17	886.25	789.76	156.95	451.4	376.55
20	Sep-17	900.84	773.57	170.95	443.98	401.5
21	Oct-17	902.24	932.02	191.1	454.81	428.4
22	Nov-17	924.79	912.9	180.65	481.57	404.15
23	Dec-17	934.12	912.4	195.2	514.11	431.85
24	Jan-18	1,000.62	952.27	203.45	567.49	399.5
25	Feb-18	940.01	945.59	188.3	578.52	369.9
26	Mar-18	940.96	874.41	177.8	558.39	326.85
27	Apr-18	969.99	954.25	180.55	591.79	340.4
28	May-18	1,067.35	912.7	177.9	607.73	282.5
29	Jun-18	1,051.88	963.32	158.4	650.03	269.3
30	Jul-18	1,087.33	1,174.86	165.7	678.82	264.1
31	Aug-18	1,028.31	1,229.99	180.05	716.61	267.5
32	Sep-18	1,000.80	1,246.14	177.2	726.06	223.7
33	Oct-18	953.75	1,051.28	153.25	682.65	179.1
34	Nov-18	1,061.86	1,156.59	140.3	663.8	171.95
35	Dec-18	1,058.49	1,110.72	149.9	655.35	172.7
36	Jan-19	1,037.67	1,215.63	141.25	749.55	181.2
37	Feb-19	1,036.47	1,219.49	148.65	734.3	177.45
38	Mar-19	1,156.88	1,350.45	159.75	743.85	174.25
39	Apr-19	1,156.15	1,379.72	169.2	751.35	214.3
40	May-19	1,209.98	1,317.66	171.95	737.75	172.6
41	Jun-19	1,219.16	1,241.33	167.75	732	162.55
42	Jul-19	1,123.32	1,155.30	138.85	793.65	135.6
43	Aug-19	1,113.97	1,236.83	121.2	814.9	116.7
44	Sep-19	1,227.45	1,319.74	131.8	805.65	117.45
45	Oct-19	1,230.35	1,450.60	141.7	685.6	177.7
46	Nov-19	1,274.95	1,536.58	131.75	696.35	161.5
47	Dec-19	1,272.10	1,499.83	128.8	731.15	185.15
48	Jan-20	1,226.30	1,398.39	108.95	775.95	176.6
49	Feb-20	1,177.65	1,316.17	91.95	731.7	128.95
50	Mar-20	861.9	1,103.29	68.3	641.5	71.05
51	Apr-20	1,001.80	1,452.23	79.9	715.5	93.25
52	May-20	951.65	1,464.40	83.2	691	87
53	Jun-20	1,065.85	1,704.10	81.35	735.95	98.25
54	Jul-20	1,032.80	2,067.10	78.3	966	104.65

55	Aug-20	1,115.85	2,080.70	81.95	928.6	143.2
56	Sep-20	1,078.60	2,234.35	69.25	1,008.25	133.3
57	Oct-20	1,183.55	2,064.35	64.9	1,060.60	132.65
58	Nov-20	1,440.85	1,929.80	78.5	1,100.00	180.35
59	Dec-20	1,436.30	1,985.30	93.05	1,255.80	183.85

Table 1 presents the price moment of shares selected for the study period from February 2016- December 2020. based on the table one can notice that how much share price has fluctuated during this period. if we notice the share price of HDFC BANK it has increased drastically from January 2018 till date and the same momentum has found in RELIANCE INDUSTRIES , the share price of reliance industry started to raise from July 2018 . but ONGC AND TATA MOTORS were not performing better like hdfc bank or reliance industries. If we see the price of both the stocks ,its been decreasing from February 2016 and started consolidating in the price of rs.202 and started decreasing .let us understand through MACD chart the performance of 5 stock .

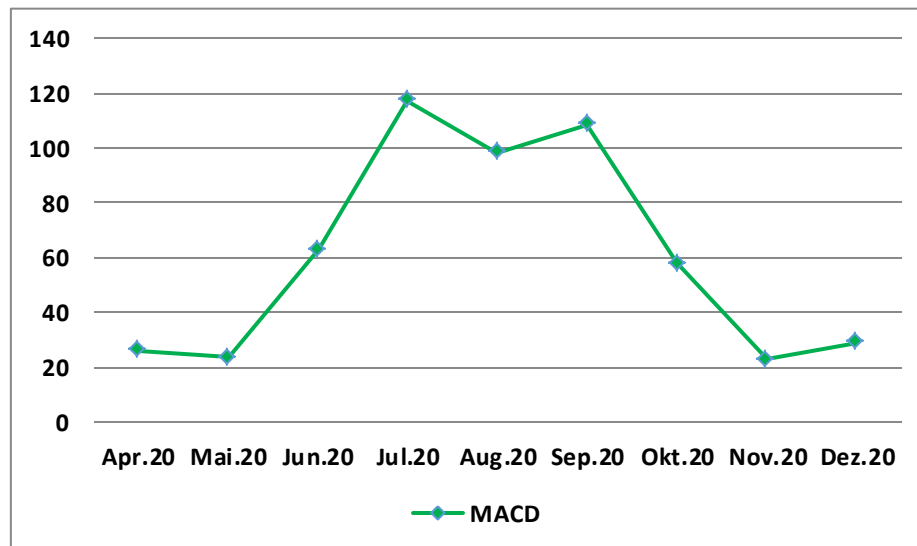
TABLE 1: CHART SHOWING THE MACD OF HDFC BANK DURING FEBRUARY 2016-DECEMBER 2020



INTERPRETATION:

During the study period from february 2016 to december 2020, macd of hdfc bank shows a zero cross over effect. It was negative, showing bearish trend and started increasing and crossed zero after april 2018 indicating bullish trends. It meets a fall on june 2018 and a sudden fall after july 2018 and become bearish. The recent trend of hdfc banks is bullish after october 2018. There are probable chances of it to be bullish again. Zero crossovers provide evidence of a change in the direction of a trend but less confirmation of its momentum than a signal line crossover.

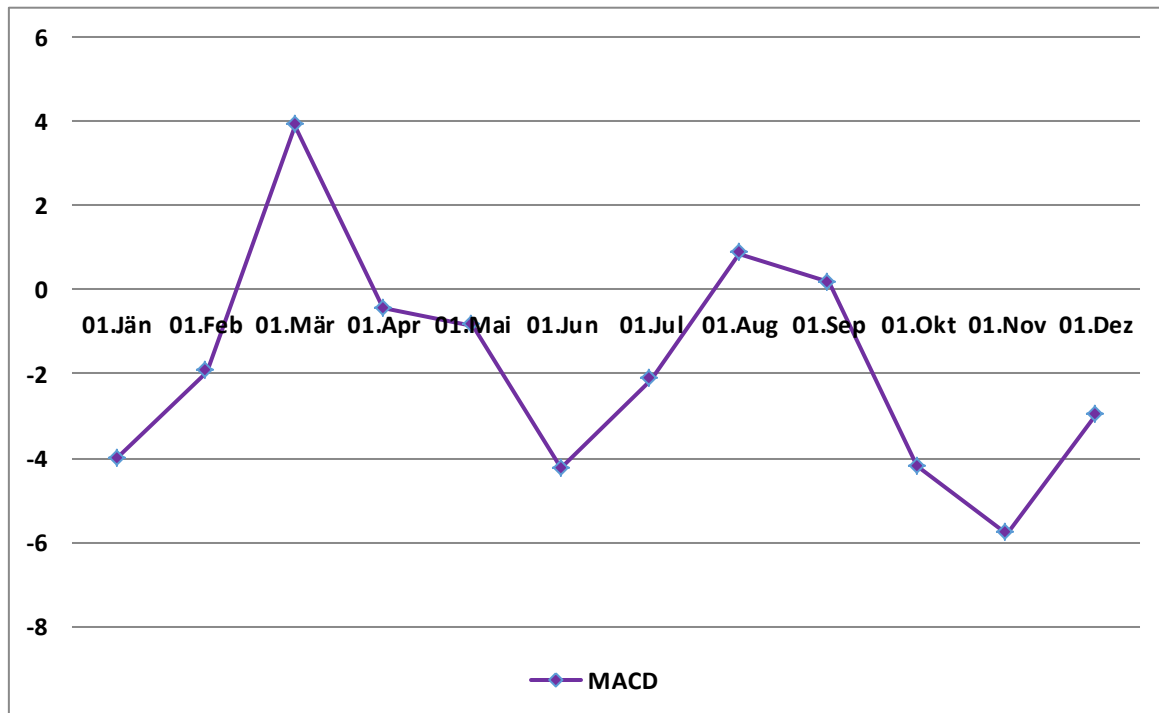
TABLE2: CHART SHOWING MACD OF RELIANCE DURING FEBRUARY 2016-DECEMBER 2020



INTERPRETATION:

During the study period from february 2016 to december 2020, macd of reliance industries shows a zero cross over effect. It was negative, showing bearish trend and started increasing and crossed zero after may 2018 indicating bullish trends. It meets a fall on september 2020 and become bearish. The recent trend of reliance industries is bullish after november 2020. There are probable chances of it to be bullish again. Zero crossovers provide evidence of a change in the direction of a trend but less confirmation of its momentum than a signal line crossover.

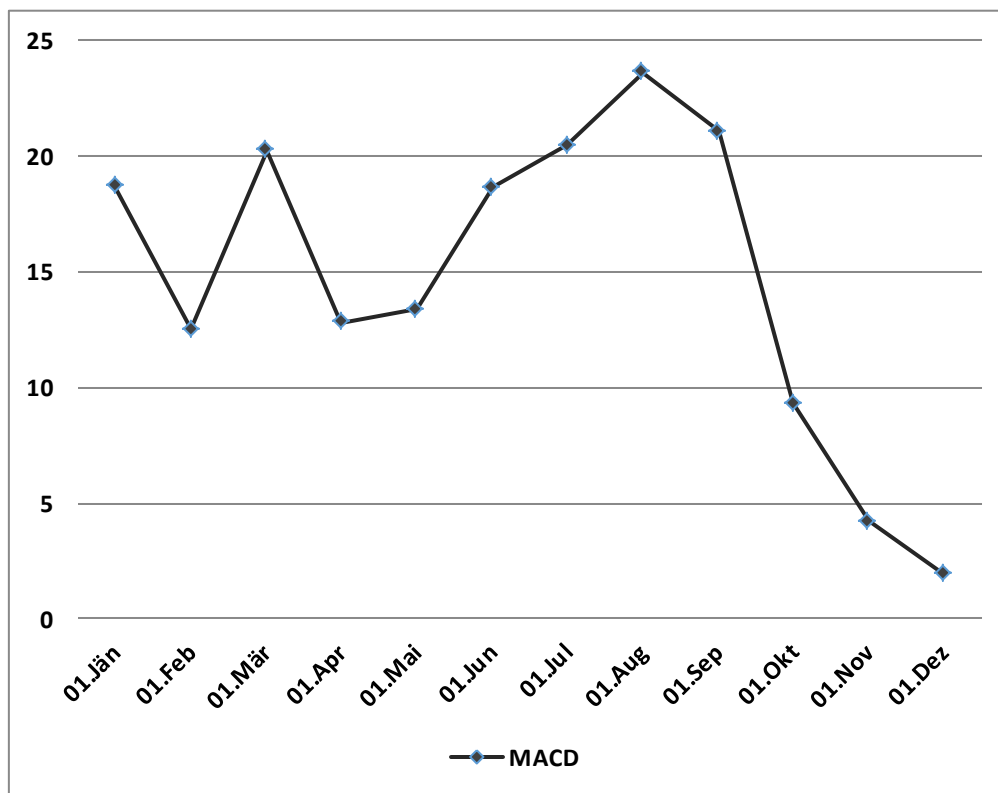
TABLE3: CHART SHOWING THE MACD OF ONGC DURING FEBRUARY 2016-DECEMBER 2020



INTERPRETATION:

During the study period from february 2016 to december 2020, macd of ongc shows a zero cross over effect. It was negative, showing bearish trend and started increasing and crossed zero after march 2019 indicating bullish trends. It meets a fall on june 2019 and become bearish. The recent trend of ongc is bearish after september 2019. There are probable chances of it to be bullish again as per the recent macd on december 2020. Zero crossovers provide evidence of a change in the direction of a trend but less confirmation of its momentum than a signal line crossover.

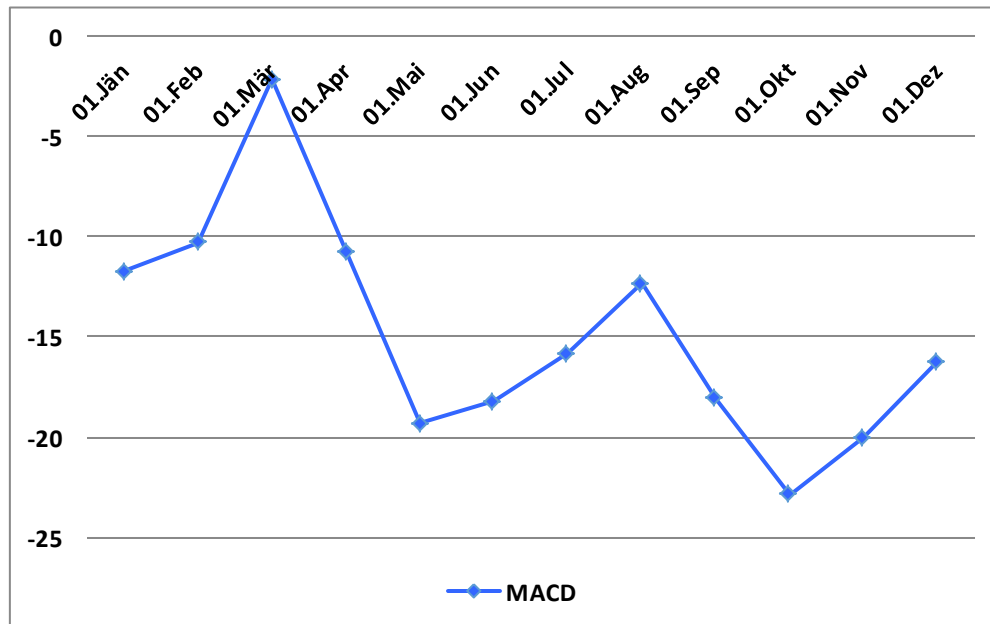
TABLE 4:CHART SHOWING THE MACD OF INFOSYS DURING FEBRUARY 2016-DECEMBER 2020



INTERPRETATION:

During the study period from february 2016 to december 2020, macd of infosys shows few zero cross over effect. It was negative, showing bearish trend during february 2020 to may 2020 may be an impact of covid 19 pandemic outburst hitting the it market of us and europe, but started increasing from june 2020 and indicating bullish trends. The recent trend of infosys is bullish after july 2020. There are probable chances of it to remain bullish. Zero crossovers provide evidence of a change in the direction of a trend but less confirmation of its momentum than a signal line crossover.

TABLE 5:CHART SHOWING THE MACD OF TATA MOTORS DURING FEBRUARY 2016- DECEMBER 2020



INTERPRETATION

During the study period from february 2016 to december 2020, macd of tata motors shows a zero cross over effect. It was negative, showing bearish trend until july 2020. It meets a rise after august 2020 showing bearish indications. The recent trend of tata motors is bullish after august 2020. There are probable chances of it to be bullish. Zero crossovers provide evidence of a change in the direction of a trend but less confirmation of its momentum than a signal line crossover.

5.FINDINGS OF THE STUDY

- ✓ From the HDFC Bank, it is noted that a positive trend is witnessed during the study period from February 2016 to December 2020. The highest MACD is noticed in May 2018 as 29 and the lowest being less than 10 in March 2020. The lower low is considered as oversold levels, but the MACD is found to be between 25 to 30. The present position of HDFC bank is found as uptrend momentum
- ✓ From the Reliance Industries, it is noted that a positive trend is witnessed during the study period from February 2016 to December 2020. The highest macd is noticed in July 2018 as and bearish in March 2020. The lower low is considered as oversold levels, but the MACD is found to be between 30 and 40. The present position of Reliance Industries is found as positive trend momentum and share price started to increase from march 2020.

- ✓ From the ONGC, it is noted that a positive trend is witnessed during the study period from February 2016 to December 2020. The highest macd is noticed in February 2018 and the lowest being February 2020. The lower low is considered as oversold levels, but the macd is found to be between 10 and 30. The present position of ONGC is found as bearish momentum .
- ✓ From the Infosys, it is noted that a steady trend is witnessed during the study period from February 2016 to December 2020. The highest MACD is noticed in December 2020 and the lowest being in october 2017. The lower low is considered as oversold levels, but the macd is found to be between 0 and 10. The present position of Infosys is found as positive uptrend momentum.
- ✓ From the Tata Motors, it is noted that a positive trend is witnessed during the study period from February 2016 to December 2020. The highest MACD is noticed in november 2020 and the lowest being February . The lower low is considered as oversold levels, but the MACD is found to be between 0 and 10. The present position of Tata Motors is found as negative momentum.

6.CONCLUSION

The study meant to do the technical analysis of selected companies from top 5 list traded in NSE India. The market is fluctuating very ghastly, real worth of the shares also changing. This study covers few selected companies. This is done by adopting various technical tools. It is found that public software companies' needs are not performing as good as selected companies.

Technical analysis and fundamental analysis are two very different approaches, but one does not completely exclude the other. If you focus on fundamentals, it is still worth checking out the chart of a company, when you are about to buy or sell stocks of it. Similarly, if you focus on technical signals, it is worth checking the fundamentals of companies. For Long-term investing, it is better to use both the fundamental and technical analysis simultaneously. By its nature, technical analysis tends to be useful for short-term trading rather than long-term investing. For the better returns it is always advisable to use the combination of both. The analysis shows that all the selected companies have shown consistently good performance and performance is improving every year. The performance of all the software companies is likely to be much bettering the year to come. The study has shed much light of the strength as a tool for generating and distributing the wealth of the community. The study has also revealed what more is desirable for greater effectiveness in the future. It is on account of the relaxation added to the lockdown policy by the Indian government. The unprecedented pandemic has already brought 19 challenges to almost all countries. Not a single sector is left unaffected because of COVID-19. In brief, the results conclude that the Coronavirus outbreak has affected the stock price and increased the volatility in the Indian stock markets, and affect the financial system.

REFERENCE

- 1.Cootner P.,(1962),”Stock Prices : Random vs. Systematic Changes. Industrial Management Review, 3 (Spring): pp. 24-45.
- 2.Eugene F.Fama (1965). “The Study of Stock Prices”. Journal of Business, January 1965
- 3.J. L. Sharma, Robert E. Kennedy (1977). “A comparative analysis of stock price behavior on the Bombay, London and New York stock exchange”. Journal of Financial and Quantitative Analysis, Vol. 12 , No.3, p 391 – 394
- 4.Fernando Fernández-Rodríguez, Simón Sosvilla-Rivero, Julián Andrada-Félix (1999). “Technical Analysis in the Madrid Stock Exchange”, FEDEA –D.T.99-05, p 1-29
- 5.Osler, C.L. (2000).”Support for Resistance: Technical Analysis and Intraday Exchange Rates,” Federal Reserve Bank of New York Economic Policy Review 6 , p 53-65.
- 6.Gupta, L.G (2003). “Stock Market Investors’ Biggest Worries Today.” Portfolio Organiser. Vol.41, No.5, 2003, p 47-51
7. K., Y. Wang, (2006). “The causality between stock index returns and volumes in the asian equity markets”. Journal of International Business. Res., 5, p 63-74.
- 8.Bhanu Pant and Dr.Bishnoy(2001),”Testing Random Walk Hypothesis for Indian Stock Market Indices, paper presented at iicm conference in 2002, pp. 1-15.
- 9.Nath, G.C. and Verma, S. (2003). Study of Common Stochastic Trend and Cointegration in the Emerging Markets: A Case Study of India, Singapore and Taiwan. Research Paper, NSE-India.
- 10.James Riedel (1997): “Capital Market Integration in Developing Asia”. Blackwell Publishers Ltd.
- 11.Juhi Ahuja (2012), “Indian Capital Market: An Overview with Its Growth” VSRD International Journal of Business & Management Research Vol. 2 (7), pp. 386-399