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#### Research Study on Technical Analysis of Selected India Private and Public Bank

Mr. Rahul Chauhan

Assistant Professor, Parul Institute of Business Administration, Parul University, Vadodara Mr. Neel Rajpurohit

Student, Parul Institute of Business Administration, Parul University, Vadodara

#### ABSTRACT

Technical analysis uses historical stock statistics, usually price and volume data, to forecast future prices. In layman's terms, a technical analyst finds a pattern in a stock's data, makes the assumption that the pattern is going to repeat into the foreseeable future, and accordingly places his/her trade in the direction signaled by the pattern. Technical indicators are frequently used by technical analysts to help make their trading decisions. Popular technical indicators include moving averages, MACD, regressions, support/resistance levels, etc. Technical analysts essentially look for trends in the market. Their basic assumption is that price of a stock already has all information priced into it and that a stock is either always 'trending' up, down, or sideways. Prices move in patterns and price action repeats itself. Charts are frequently used by technical analysts to help make their trading decisions.

Short term investment at the time only for useful technical analysis. Movement of the share price in the technical analysis. In other words a study of past share prices behavior to predict the future trend is termed as technical analysis. Technical analysis in the as investors buying and selling transaction at the time any kind of assumptions of for the any type of investment like market value is determined slovenly by the interaction of supply and demand, Supply and demand are governed by numerous factors both rational and irrational, Chare in trend are caused by shift in supply and demand, Some chart patterns trend to repeat themselves.

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Technical analysis can be defined as a method that attempts to forecast future price trends by the means of analyzing market action. It was established as early as 18th century. However, most of its methods as

E-mail address: info@researchparks.org

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we know them today were created in the first decades of 20th century. The core idea of technical analysis is that history tends to repeat itself. That is why we can find certain situations in the market that occur regularly. These situations can be discovered by chart analysis and technical indicators, which we can use for our advantage – and that is precisely what technical analysis is trying to do.

Study of past share prices behavior to predict the future trend is termed as technical analysis. Uses statistics and a stock's historical performance to forecast future stock prices. Technical analysis is the study of how securities behave and how to exploit that information to make money while avoiding losses. In the second phase of the study we make a study description regarding conceptual framework of selected banks like Bank Of Baroda, Bank Of India, State Bank of India, ICICI, HDFC and Kotak Mahindra. Third phase contain Research and planning procedure includes the objectives of the study, limitation, literature review, hypothesis, future scope. In Forth phase discuss about the collection of data for five year of selected banks. Than to also analysis of the data and also interpreted.

#### **INTRODUCTION**

Technical analysis uses historical stock statistics, usually price and volume data, to forecast future prices. In layman's terms, a technical analyst finds a pattern in a stock's data, makes the assumption that the pattern is going to repeat into the foreseeable future, and accordingly places his/her trade in the direction signaled by the pattern. Technical indicators are frequently used by technical analysts to help make their trading decisions. Popular technical analysts essentially look for trends in the market. Their basic assumption is that price of a stock already has all information priced into it and that a stock is either always 'trending' up, down, or sideways. Prices move in patterns and price action repeats itself. Charts are frequently used by technical analysts to help make their trading decisions.

For example, suppose a trader notices (usually with the help of a chart) that the previous 25 times, every time stock XYZ trended up 1 per cent, it was followed by a downward trend. Essentially, the trader has stumbled upon a 'zigzag' pattern: it seems that the market begins to sell the stock every time it trends up 1 per cent. The trader has now created a signal: the next time the stock trends up 1 per cent, he/she will look to sell the stock. Similarly, traders look for other such types of patterns to help make their trading decisions. One can get started with technical analysis by researching the aforementioned popular technical indicators. Ensure that your trading broker offers charting tools as a part of your trading software. Ask your broker what technical indicators are available and how to go about implementing them. While fundamental analysis is much more qualitative and involves more subjectivity, charts are the main tool of technicians. Here are a few chart-watching basics

#### **Price Trends**

Is the price of the stock moving higher or lower? How long has it been doing so? Many chartists will only buy securities that are in uptrends. They may wait for a short-term downtrend to enter, but won't even consider the stock if the longer-term trend is lower.

#### Volume

I've often said that charts are like a Rorschach (ink blot) test for the market, but volume is its lie detector. Volume can tell us how strong the prevailing trend might be. Decreasing volume can be a sign that the trend might be on the verge of a reversal.

#### **Moving Averages**

Adding moving average lines to a chart can help determine the overall trend direction. A moving average line simply plots the average price of a security over a set period of time. For example, the 50-

day moving average indicates the average price over the past 50 days. Technicians like to buy when the moving average is trending upward and the price pulls back a touch to allow for a good "entry point" into the stock.

#### **Fundamental analysis**

On the other end of the trading spectrum, we find fundamental analysts. A fundamental analyst is bound to clash with a technical analysis almost as viciously as an Apple user vs. a PC user!The reasons have to do with the core tenet that fundamental analysts live by: the market cannot be depended upon accurately pricing a stock. While a technical analyst believes that external factors, such as earnings reports, economic news releases, etc. - are immediately and always priced into a stock, a fundamental analyst believes that it takes time for a stock to accurately reflect all market information; hence, when his/her 'calculated' price of the stock varies from the actual price of the stock, he/she can trade and earn a profit. While technical analysis is more associated with traders, who are constantly looking for patterns to enter and exit trades, investors are usually more drawn to fundamental analysis.The de facto classic example of a successful fundamental analyst is the world-renowned 'value investor' Warren Buffett. Mr. Buffett implemented value investing, essentially looking for stocks whose intrinsic value was higher than their market price, and was never afraid to place large, long-term trades on these stocks.

Determining the intrinsic value of a stock is the chief mission of a fundamental analyst. The fundamental analyst will look at a company's profile, seeing when its latest earnings reports were released, what type of news is expected from the company, and accordingly analyses if the market has correctly priced in all this information into the stock's price. Successful fundamental analysts do not shy away from financial statements. Analysts look at a company's revenue, expenses, assets, and liabilities and all other relevant financial aspects of a company. Taking all this data into account, the analyst attempts to understand what the true value of the stock should be.

One can get started with fundamental analysis by researching how stock prices are determined by a market. By understanding how to interpret earning reports, financial statements, balance sheets, cash flow statements, etc., the reader would understand how stock prices move in reaction to these pieces of information. That way, the next time you feel that a stock is underpriced based on what you know about the stock, you can invest in the stock more confidently.

Technical analysis and fundamental analysis are both powerful strategies that investors and traders can utilize to aid their trading decisions. Just like how you might be holding an iPhone while typing away on a PC, it **IS** possible to utilize both technical analysis and fundamental analysis. One just needs to keep an open mind.

Fundamental analysis was the only investment method that was given any credibility. That has changed as the advent of high-speed computing has made technical analysis easier and more widely available. Many large investment firms use black box trading, or computer modeling, to determine their entry and exit points. That means that many of the largest market players are making their trading decisions based on computer algorithms. In fact, some estimate that computerized trading represents up to 70% of the volume on exchanges today. Like it or not, your investments are moving based on technical factors as much as fundamental ones. The markets have changed, and we need to change our strategies with them.

The best approach to investing likely involves some combination of fundamental and technical analysis. I like to choose stocks or sectors that have strong fundamentals and then use technical analysis to help me decide when to buy or sell them.

## LITERATURE REVIEW

(Dr. Pallavi, 2000) in her research found that , as far as the Indian banking is concerned it can be categorized in different modes such as government owned, private banking and specialized banking institution. In India Reserve Bank of India is the control body which works above to all Indian banks. Since from 1969 the public sectors banks has cover-up the decades to establish the Indian banking sector due to the demand of customer value and customer base. (Chitra, 2011) in her research found that technical analysis is a study of the stock market relating to factors affecting the supply and demand of stocks and also helps in understanding the intrinsic value of shares and to know whether the shares are undervalued or overvalued. The stock market indicators would help the investor to identify major market turning points. (Venkatesh & Tyagi, 2011) in their research paper found that the results of a questionnaire survey in September to November 2010 on the use of Technical analysis by brokers/fund managers in Indian stock market to form their forecasts of share price movements. The findings of the research reveal that more than 85 percent of the respondents rely upon both Fundamental and Technical analysis for predicting future price movements at different time horizons.

(Dr.Ayyappan & Mr.Sakthivadivel, 2012) Stated that the private sector Banks are expanding their products and services into various part of the country and are posing a real competition to the public sector Banks. A study was carried out to analyze the growth and trend of certain financial parameters of public and private sector Banks. (Karan, 2012) in his paper research that Indian economy has been recording impressive growth rates since 1991. The main thrust of the financial sector reforms has been the creation of efficient and stable financial institutions and development of the markets, especially the money and government securities market. In addition, fiscal correction was undertaken and reforms in the banking and external sector were also initiated.

(Sudheer, 2012) in his research found that technical analysis is study of predicting prices of securities for future the main aim of technical analysis is to generate returns by letting person decide when to enter and when to exit in the security. Bottom line is to buy at tough (deep decline) and to sell at peek to get substantial amount of return or profit. (Varathan N & Tamilenthi, 2012) concluded that technical analysis of securities is a study of past price and volume trends to judge the direction of future price movements of scrips. The goal is to produce predictions of price direction and magnitude such that large gains from the relatively few correct predictions are more than enough to offset the many smaller losses from incorrect predictions, leading to a positive return in the long run through proper risk control and money management with the tools.

(Hemalatha, 2013) conducted a study to analyze and understand the equity share of the Canara Bank. The study is fully based on the secondary data which have been collected from the company reports and websites. Today, Canara Bank occupies a premier position in the comity of Indian banks. The objective of the study is to analyze the price movement of share, to compare the stock price movements with the market and to discover the trend in the future. (Jayakumar & Sumathi, 2013) in their research found that the Indian Banking Sector is one of the wide sectors in the country and the various factors which affect the share prices of Banking Companies. In this result a detailed analysis of the trend in share price movement.

(Sangeetha & Jain, 2013) opinioned that banking companies in the service sector exhibit the problem of distinct results in terms of efficiency. This problem is a cause of concern for many big organizations in the service sector like hotels, courier companies, hospitals, banks and so on. In particular, the last decade has observed continuous amendment in regulation, technology and competition in the global financial services industry, and Indian banks are no exception.

(Gajera Alpeshkumar 2016) in his theses concluded that return on assets is high in private sector banks while return on equity is high in public sector banks which indicate that private sector banks have optimum utilization of their assets. One reason behind deviation is public sector banks have network in rural area also which is not as profitable as urban area due to which public sector banks performance is poor compare to private sector banks.

(Chirag V. Jiyani 2015) in his article concludes that private sector banking witnessed substantial growth and superior financial services. Deposits, Advances, Total Income, Total Expenses of private banks have increased during the study period. The study also shows that overall financial performance of private banks improved during the study period.

(T.Deva Prasad, C.Chaitanya, A.Thulasi Kumar 2018) in their article states that result that technical indicators can play useful role in the timing stock market entry and exit. By applying technical tools brokers or investors enjoy substantial profit. Shares volatility of banking sectors differ from other sectors because banking share volatility depends upon RBI decision.

(Baggam Seshu Sailendra, T.Subramanian 2015) in a paper titled "A Study on the Technical Analysis of Share Price Movements of Banking Sector with Special Reference to NSE" published in Transactions on Engineering and Sciences, analyzed that share prices of private sector banks shows more fluctuations than public sector banks".

(Dr. Virender Koundal 2012) in his paper titled "performance of Indian banks in Indian financial System" concludes that various reforms have produced favorable effects on commercial banks in India, but it is realized that the major benefit is taken by the private sector banks and foreign banks whereas public sector banks are still lagging behind on various financial parameters.

(A. John William, T. Vimala 2015) in a research paper entitled "a study on equity share price volatility of selected Private banks in (NSE) stock exchange" observes that even though the private banking companies adopt different operational strategy the share volatility is similar for all the selected private banks.

(Milan B. Undavia 2016) in his paper titled "Fundamental Analysis of Selected Public and Private Sector Banks in India" found that South Indian Bank is the best stock from private sector banks for investment purpose & PNB is the best stock from Public Sector banks for investment purpose.

(Malaya Ranjan Mohapatra, Avizeet Lenka, Subrat Ku-mar Pradhan 2015) in a paper titled "A Study of Operational Efficiency of Commercial Banks in Indian Financial System: At a Glance have analyzed the operational efficiency of commercial banks in India and challenges faced by public sector banks. The parameters considered for study are labour productivity, branch expansion and profitability ratios. The study concluded that internal management and employee efficiency of foreign banks are far better than other sectors of commercial banks. Public sector banks are lagging behind in various financial parameters.

(Seema Malik 2014) in a research paper titled "Technological Innovations in Indian Banking Sector: Changed face of Banking" reviewed the effect of technological innovations and benefits and challenges of changing banking sector. Technology and financial innovations led to tremendous improvement in banking services and operations over the past decades. Survival, growth and existence is depends on organisational effectiveness and operational efficiency in the current scenario where customer's needs are changing every day.

## **RESEARCH METHODOLOGY**

Technical analysis is the study of how securities behave and how to exploit that information to make money while avoiding losses. The technical style of trading is opportunity. Technical analysis to predict returns among these trading rules of the moving average rules were the most popular.

Technical analysis is a stock market consideration factors related to the supply and demand. Technical analysis is the study of the past market data, mainly price and volume in pursuit of a forecast of the future direction of the prices. The historic data up to date and future combines with the specific circumstances of the investor to produce trading decisions. During the process technical analysis may employ models and trading rules based on price and volume transformations, technical analysis to allowing the trader/investor.

It is an approach by prediction of future price through the forces like supply and demand. It is a tool of speculation which is the skill of analyzing data and taking positions of various market situations to profits from favorable price movement.

#### Title of Research problem

Is there any "Technical analysis of Indian private and public banks" The detailed study of the topic can be seen

#### **Objective of the study**

- > To study share price movements on banking sectors.
- > To utilize the share price movement on banking sectors.
- > To find out the upward and downward behavior in share price movement on banking companies.
- To understand and identify the Overbought and Oversold price levels as derived from using all the historical data available.
- To maximize the gains from all shorts of trading activities, and minimize risk and losses arising from such activities.
- > To identify the price levels where chances of a profitable trade are less, and recognize 'price-patterns' in and at such levels if and when they occur to avoid such trades.
- > To gain the practical knowledge of technical analysis.
- > To know how charting techniques are useful to the buy or sell decision.

#### Sources of the research study

Secondary source:-

Secondary data taken from selected banks of daily share prices. In this research, we have collected data from websites. So we can use secondary data.

Secondary data collect from following websites.....

- www.moneycontrol.com
- ➤ www.nse
- www.iciciindia.com
- www.bankofindia.com
- www.bankofbaroda.com
- ➢ www.SBIbank.com
- ➢ www.HDFC.com
- www.kotakmahindrabank.com

Methodology of Research Study				
Source of Data	Required data will be collected through secondary sources			
<b>Research Instrument</b>	Website, annual report data			
Sample size	6 Banks			
Sampling unit	BOB, SBI, ICICI, HDFC, Bank of India, Kotak Mahindra			
Hypothesis test	ANOVA & Correlation regression simple.			

#### **HYPOTHESIS**

- Ho:-Change in share price of Indian public bank is affected to the share price of Indian private bank.
- H1:-Change in share price of Indian BOB bank is not affected to the share price of Indian ICICI bank.
- H2:-Change in share price of Indian BOB bank is not affected to the share price ofIndian HDFC bank.
- H3:-Change in share price of Indian BOB bank is not affected to the share price of Indian Kotak Mahindra bank.
- H4:-Change in share price of Indian SBI bank is not affected to the share price of Indian ICICI bank.
- H5:-Change in share price of Indian SBI bank is not affected to the share price of Indian HDFC bank.
- H6:-Change in share price of Indian SBI bank is not affected to the share price of Indian Kotak Mahindra bank.
- H7:-Change in share price of Indian Bank of India bank is not affected to the share Price of Indian **ICICI** bank
- H8:-Change in share price of Indian Bank of India bank is not affected to the share Price of Indian HDFC bank.
- H9:-Change in share price of Indian Bank of India bank is not affected to the share Price of Indian Kotak Mahindra bank.

#### **HYPOTHESIS TESTING-1**

Ho: -Change in share price of Indian public bank is affected to the share price of Indian private bank.

H1:- Change in share price of Indian BOB bank is not affected to the share price of Indian HDFC bank.

Dependent variable is HDFC, Independent variables BOB, 1246 cases.

Variable	Coefficient	St. Error	t-value	p (2 tails)
Intercept	3072.9734	93.712674	32.791439	<.001
BOB	-2.648503	.1322226	-20.03064	<.001

R-Square = 0.2439Adjusted R-Square = 0.2433

Cohen's f-square = 0.3225, a small effect size.

Analysis of V	Variance to Test Reg	gression F	Relation:-		
Source	Sum of Sqs	DF	Mean Sq	F	p-value
Regression	215720879.862	1	215720879.862	401.22646	<.001
Error	6.69E+08	1244	537653.67		
Total	884562045.025	1245			
A low p-valu	e suggests that the	lependent	t variable HDFC,		
May be linea	rly related to indepe	endent var	riable BOB.		
MEAN $X = 0$	591.119	S.I	D. $X = 157.163$ (	CORR XSS =	30751680.0
MEAN $Y = 2$	1242.547	S.I	D. $Y = 842.905$ (	CORR YSS =	884558200.0
REGRESSIC	ON MS=15720879.8	62 RE	SIDUAL MS= 537	653.67	
Pearson's r (Co	orrelation Coefficier	t) = -0.49	38		
The linear regr	ession equation is: -	HDFC =	3072.973 + -2.648	3503 * BOB	

Test of hypothesis to determine significance of relationship:-

H (null):- Slope = 0 or H (null):- rho  $\neq 0$  (two-tailed test)

t = 20.03 with 1244 degrees of freedom  $p \le .001$ 



#### Interpretation

Calculate value is higher than the table value. So null hypothesis is rejected. In short alternate hypothesis is accepted. Change in share price of BOB bank is not affected to the share price of HDFC bank.

#### **HYPOTHESIS TESTING-2**

- Ho: -Change in share price of Indian public bank is affected to the share price of Indian private bank.
- H2:- Change in share price of Indian BOB bank is not affected to the share price of Indian ICICI bank.

Dependent variable is ICICI, Independent variables BOB 1246 cases.

Variable	Coefficient	St. Error	t-value	p (2 tails)	
Intercept	521.42165	14.956032	34.863636	<.001	
BOB	624115	021102	29.576099	<.001	
R-Square = (	 0.4129 Adju	sted R-Squa	re = 0.4124		
Cohen's f-sq	uare = 0.7032, a m	edium effect	t size.		
Analysis of V	Variance to Test R	egression Re	elation:-		
Source	Sum of Sqs	DF	Mean Sq	F	p-value
Regression	11978997.6662	2 1	11978997.6662	874.7456	1 <.001
Error	1.70E+07	1244	13694.264		
Total	29014662.527	6 1245			
A low p-valu	ie suggests that the	e dependent v	variable ICICI		
May be linea	arly related to indep	pendent varia	able BOB.		
MEAN X =	691.119	S.:	D. X = 157.163	CORR XSS	= 30751680.0
MEAN Y =	952.758	<b>S</b> .	D. Y = 152.663	CORR YSS	= 29015810.0
REGRESSIC	ON MS=11978997	.666 RI	ESIDUAL MS= 1	13694.264	
earson's r (Co	orrelation Coefficie	ent) = 0.6425	5		
he linear regi	ression equation is:	- ICICI = 5	21.4216 + 0.6241	15 * BOB	
est of hypoth	esis to determine s	ignificance of	of relationship:-		
(null): Slope	e = 0 or H (null):	rho $\neq 0$ (tw	vo-tailed test)		

t = 29.58 with 1244 degrees of freedom  $p \le .001$ 



#### Interpretation

Calculate value is higher than the table value. So null hypothesis is rejected. In short alternate hypothesis is accepted. Change in share price of BOB bank is not affected to the share price of ICICI bank.

#### **HYPOTHESIS TESTING-3**

Ho: - Change in share price of Indian public bank is affected to the share price of Indian private bank.

H3:- Change in share price of Indian BOB bank is not affected to the share price of Indian Kotak Mahindra bank.

Dependent variable is Kotak Mahindra, Independent variables BOB 1246 cases.

Variable	Coefficient	St. Erro	or t-value	p (2 t	ails)
Intercept	871.78675	14.861	559 58.66051	8 <.00	)1
BOB	3679832	02096	-17.5491	6 <.00	)1
R-Square =	0.1984 Adj	usted R-So	quare = 0.1978		
Cohen's f-sc	juare = 0.2476, a s	mall effec	t size.		
Analysis of	Variance to Test F	Regression	Relation:-		
Source	Sum of Sqs	DF	Mean Sq	F	p-value
Regression	4164350.96453	1	4164350.96453	307.97299	) <.001
Error	1.68E+07	1244	13521.806		
Total	20985477.3485	1245			
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Peer review under responsibility of Emil Kaburuan. ISSN (electronic): 2620-6269/ ISSN (printed): 2615-4021 . Hosting by Research Parks All rights reserved. A low p-value suggests that the dependent variable Kotak Mahindra,

May be linearly related to independent variable BOB.

S.D. X = 157.163	CORR XSS = 30751680.0
S.D. Y = 129.828	CORR YSS = 20984990.0
RESIDUAL MS=	13521.806
	S.D. X = 157.163 S.D. Y = 129.828 RESIDUAL MS=

Pearson's r (Correlation Coefficient) = -0.4455

The linear regression equation is:- Kotak Mahindra = 871.7867 + -0.3679832 \* BOB

Test of hypothesis to determine significance of relationship:-

H (null): Slope = 0 or H (null):  $rho \neq 0$  (two-tailed test)



t = 17.55 with 1244 degrees of freedom  $p \le .001$ 

#### Interpretation:-

Calculate value is higher than the table value. So null hypothesis is rejected. In short alternate hypothesis is accepted. Change in share price of BOB bank is not affected to the share price of Kotak Mahindra bank.

#### **HYPOTHESIS TESTING-4**

Ho: - Change in share price of Indian public bank is affected to the share price of

Indian private bank.

H4:- Change in share price of Indian SBI bank is not affected to the share price of Indian HDFC bank.

Dependent variable is HDFC, Independent variables SBI 1246 cases.

Variable	Coefficient	St. Error	t-value	p (2 tails)	
Intercept	1421.8675	89.714007	15.84889	<.001	
SBI	0830165	.0400386	-2.073413	3 0.038	
R-Square = 0	0.0034 Adj	usted R-Square	= 0.0026		
Cohen's f-sq	uare = 0.0035, a s	mall effect size	•		
Analysis of V	ariance to Test Re	gression Relati	on:-		
Source	Sum of Sqs	DF Mea	n Sq	F	p-value
Regression	3046360.0174	1 304	46360.0174	4.2990408	0.038
Error	8.82E+08	1244 70	08613.89		
Total	884562045.025	1 245			
A low p-valu	ue suggests that th	e dependent va	riable HDFC,		
May be linea	arly related to inde	ependent variab	le SBI.		
MEAN X =	2160.074	S.D. 2	X = 595.864	CORR XSS =	442042400.0
MEAN Y =	1242.547	S.D.	Y = 842.905	CORR YSS =	884558200.0
REGRESSIO	ON MS= 3046360	.017 RESI	DUAL MS= 70	08613.895	
 Pearson's r (Co	orrelation Coeffici	ent) = -0.0587			
The linear regi	ression equation is	HDFC = 14	21.867 + -8.30	1652E-02 * S	BI
Cest of hypoth	nesis to determine	significance of	relationship:-		
H (null): Slope	e = 0 or H (null):	$rho \neq 0$ (two	-tailed test)		
= 2.07 with	1244 degrees of	freedom $p = 0$	).038		



#### Interpretation:-

Calculate value is higher than the table value. So null hypothesis is rejected. In short alternate hypothesis is accepted. Change in share price of SBI bank is not affected to the share price of HDFC bank.

#### **HYPOTHESIS TESTING-5**

Ho:- Change in share price of Indian public bank is affected to the share price of

Indian private bank.

H5:- Change in share price of Indian SBI bank is not affected to the share price of

Indian ICICI bank.

Dependent variable is ICICI, Independent variables SBI 1246 cases.

Variable	Coefficient	St. Error	t-value	p (2 tails)
Intercept	727.33367	14.86475	48.930097	<.001
SBI	.1043598	.006634	15.731028	<.001

R-Square = 0.1659 Adjusted R-Square = 0.1653

Cohen's f-square = 0.1989, a small effect size.

Source	Sum of Sqs	DF	Mean Sq	F	p-value
Regressior Error	n 4814138.81477 2.42E+07	1 1244	4814138.81477 19453.797	247.46525	<.001
Total	29014662.5276	1245			

Analysis of Variance to Test Regression Relation:

A low p-value suggests that the dependent variable ICICI,

May be linearly related to independent variable SBI.

MEAN X = 2160.074	S.D. X = 595.864 CORR XSS = 442042400.0
MEAN Y = 952.758	S.D. Y = 152.663 CORR YSS = 29015810.0
REGRESSION MS= 4814138.815	RESIDUAL MS= 19453.797

Pearson's r (Correlation Coefficient) = 0.4073

The linear regression equation is:- ICICI = 727.3337 + 0.1043598 \* SBI

Test of hypothesis to determine significance of relationship:-

H (null): Slope = 0 or H (null):  $rho \neq 0$  (two-tailed test)

t = 15.73 with 1244 degrees of freedom  $p \le .001$ 



#### Interpretation:-

Calculate value is higher than the table value. So null hypothesis is rejected. In short alternate hypothesis is accepted. Change in share price of SBI bank is not affected to the share price of ICICI bank.

#### **HYPOTHESIS TESTING-6**

- Ho:- Change in share price of Indian public bank is affected to the share price of Indian private bank.
- H6:- Change in share price of Indian SBI bank is not affected to the share price of Indian Kotak Mahindra bank.

Dependent variable is Kotak Mahindra, Independent variables SBI, 1246 cases.

Variable	Coefficient	St. Error	t-value	p (2 tails)	
Intercept	670.46022	13.754163	48.745986	<.001	
SBI	0245331	.0061384	-3.996679	<.001	

R-Square = 0.0127 Adjusted R-Square = 0.0119

Cohen's f-square = 0.0128, a small effect size.

#### Analysis of Variance to Test Regression Relation:-

Source	Sum of Sqs	DF	Mean Sq	F	p-value	
Regression Error	n 266045.57 2.07E+07	1 1244	266045.57 16655.492	15.973444	<.001	
Total	20985477.3485	1245				

A low p-value suggests that the dependent variable Kotak Mahindra,

May be linearly related to independent variable SBI.


MEAN $X = 2160.074$	S.D. X = 595.864	CORR XSS = 442042400.0
MEAN Y = 617.467	S.D. Y = 129.828	CORR YSS = 20984990.0
REGRESSION MS= 266045.565	RESIDUAL MS= 1	6655.492

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Pearson's r (Correlation Coefficient) = -0.1126

The linear regression equation is: -

Kotak Mahindra = 670.4602 + -2.453307E-02 \* SBI

Test of hypothesis to determine significance of relationship:-

H (null): Slope = 0 or H (null):  $rho \neq 0$  (two-tailed test)

t = 4.0 with 1244 degrees of freedom  $p \le .001$ 



#### Interpretation:-

Calculate value is higher than the table value. So null hypothesis is rejected. In short alternate hypothesis is accepted. Change in share price of SBI bank is not affected to the share price of Kotak Mahindra bank.

#### **HYPOTHESIS TESTING-7**

Ho:- Change in share price of Indian public bank is affected to the share price of

Indian private bank.

H7:- Change in share price of Indian Bank of India bank is not affected to the share

Price of Indian HDFC bank.

Dependent variable is HDFC, Independent variables BOI, 1246 cases.

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Variable	Coefficient	St. Error	t-value	p (2 tails)
Intercept	792.17847	96.388995	8.2185572	<.001
BOI	1.3397289	277954	4.8199656	<.001

R-Square = 0.0183 Adjusted R-Square = 0.0175

Cohen's f-square = 0.0187, a small effect size.

#### Source Sum of Sqs DF Mean Sq F p-value Regression 16216608.4964 1 16216608.4964 23.232069 <.001 Error 8.68E+08 1244 698026.88 \_\_\_\_\_ 884562045.025 1245 Total

Analysis of Variance to Test Regression Relation:-

A low p-value suggests that the dependent variable HDFC,

May be linearly related to independent variable BOI.

MEAN X = 336.163	S.D. X = 85.188	CORR XSS = 9035040.0
MEAN Y = 1242.547	S.D. Y = 842.905	CORR YSS = 884558200.0
REGRESSION MS=16216608.496	RESIDUAL MS=	698026.878

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Pearson's r (Correlation Coefficient) = 0.1354

The linear regression equation is:- HDFC = 792.1785 + 1.339729 \* BOI

Test of hypothesis to determine significance of relationship:-

H (null): Slope = 0 or H (null): rho = 0 (two-tailed test)

t = 4.82 with 1244 degrees of freedom  $p \le .001$ 



#### Interpretation:-

Calculate value is higher than the table value. So null hypothesis is rejected. In short alternate hypothesis is accepted. Change in share price of Bank of India bank is not affected to the share Price of HDFC bank.

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#### **HYPOTHESIS TESTING-8**

- Ho:- Change in share price of Indian public bank is affected to the share price of Indian private bank.
- H8:- Change in share price of Indian Bank of India bank is not affected to the share Price of Indian ICICI bank.

Dependent variable is ICICI, Independent variables BOI, 1246 cases.

Variable	Coefficient	St. Error	t-value	p (2 tails)	
Intercept	834.38953	17.275874	48.297964	<.001	
BOI	.3521186	.0498179	7.068112	<.001	

R-Square = 0.0386 Adjusted R-Square = 0.0378

Cohen's f-square = 0.0402, a small effect size.

#### Analysis of Variance to Test Regression Relation:-

Source	Sum of Sqs	DF	Mean Sq	F p	-value	
Regression Error	1120222.0574 2.79E+07	1 1244	1120222.0574 22423.184	49.958207	<.001	
Total	29014662.5276	1245				

A low p-value suggests that the dependent variable ICICI,

May be linearly related to independent variable BOI.

MEAN X = 336.163	S.D. X = 85.188 CORR XSS = 9035040.0
MEAN Y = 952.758	S.D. Y = 152.663 CORR YSS = 29015810.0
REGRESSION MS= 1120222.057	RESIDUAL MS= 22423.184

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Pearson's r (Correlation Coefficient) = 0.1965

The linear regression equation is:- ICICI = 834.3895 + 0.3521186 \* BOI

Test of hypothesis to determine significance of relationship:-

H (null): Slope = 0 or H (null): rho  $\neq 0$  (two-tailed test)

t = 7.07 with 1244 degrees of freedom  $p \le .001$ 



#### Interpretation:-

Calculate value is higher than the table value. So null hypothesis is rejected. In short alternate hypothesis is accepted. Change in share price of Bank of India bank is not affected to the share Price of ICICI bank.

#### **HYPOTHESIS TESTING-9**

Ho:- Change in share price of Indian public bank is affected to the share price of

Indian private bank.

H9:- Change in share price of Indian Bank of India bank is not affected to the share

Price of Indian Kotak Mahindra bank.

Dependent variable is Kotak Mahindra, Independent variables BOI, 1246 cases.

Variable	Coefficient	St. Error	t-value	p (2 tails)
Intercept	766.02155	14.340687	53.415959	<.001
BOI	4419127	.0413538	-10.68614	<.001

R-Square = 0.0841 Adjusted R-Square = 0.0833

Cohen's f-square = 0.0918, a small effect size

2	C				
Source	Sum of Sqs	DF	Mean Sq	F	p-value
Regression Error	1764408.51082 1.92E+07	1 1244	1764408.51082 15451.02	114.19366	<.001
Total	20985477.3485	1245			

Analysis of Variance to Test Regression Relation:-

A low p-value suggests that the dependent variable Kotak Mahindra,

May be linearly related to independent variable BOI.

MEAN X = 336.163	S.D. X = 85.188 CORR XSS = 9035040.0
MEAN Y = 617.467	S.D. Y = 129.828 CORR YSS = 20984990.0
REGRESSION MS= 1764408.511	RESIDUAL MS= 15451.02

Pearson's r (Correlation Coefficient) = -0.29

The linear regression equation is:- Kotak Mahindra = 766.0215 + -0.4419127 \* BOI

Test of hypothesis to determine significance of relationship:-

H (null): Slope = 0 or H (null):  $rho \neq 0$  (two-tailed test)

t = 10.69 with 1244 degrees of freedom  $p \le .001$ 



#### Interpretation:-

Calculate value is higher than the table value. So null hypothesis is rejected. In short alternate hypothesis is accepted. Change in share price of Bank of India bank is not affected to the share Price of Kotak Mahindra bank.

# CONCLUSION

Technical analysis is one of the advanced which is used to analyze securities by analyzing the historical and other statistics which are generated by market activity. The stock market has a great opportunity to excel in the market, but firstly the investors need to be educated and trained with proper information about stock market secondly the analysts has to bet trained and made professional in analyzing and delivering service. These measures will lead the company towards success.

Technical analysis the analyst outlook is short term oriented. Fundamental analysis the analyst perspective is long term in nature. Technical analysis he does not distinguish between current income & capital gains he is interested in short term, and Fundamental analysis he considers total gain from equity investment consists of current yield by way of dividend and long term gain by way of capital appreciations. Technical analysis is study of stock exchange information. Fundamental analysis he forecasts stocks price the basis f economic analysis, industry analysis and company analysis.

Before going it invest, an investor should have clear knowledge of capital market o it is the part of the company to educate the investor with relate to all the types of investment alternatives available. As the long term investment is more favor to the company as it can enjoy the benefit of long term cash reserve the marketer should try to push and pull more and longer term investment from the investors. Also it is necessary to keep in mind that only maintaining more and mare fund reserve only should not be the sole objective of the company, it should predict the future changes in the value of money, by changing its mind set the company should also play the role of fund creator. Inventors perceive that the stock market activities are risky and they hesitate to come forward to invest in stock market, so the company has to execute such programs that and educate the investors about the benefits part of stock market investment and the return they get from it.

As in case of stock market half knowledge is very dangerous. So, it is the responsibility of the company to train the employees and technical analysts to make them experts in subject of stock market, so that they become experts to solve at the queries of the investors without any information or hesitation and solve the confusions of the investors to increase the investment.

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