A Study On The Effectiveness Of Technical Analysis On Indian Private Sector Banks

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Abstract:

Every human being in this world is highly desirous to earn a lot of amount through their little savings. This is possible through an efficient investment. An investment is an asset or holding of an item that generates revenue in future. In an economic sense, an investment is the purchase of goods that are not consumed today but are used in the future to create wealth. In finance, an investment is a monetary asset purchased with the idea that the asset will provide income in the future or will be sold at a higher price for a profit. Certain features characterize all investments. They are I.Return 2.Risk 3.Safety 4.Liquidity. There are different types of investment alternatives or avenues that are specific in its nature and characteristics. Indians can invest broadly into five categories of investments – Equity, Debt, Real Estate, Commodities and Miscellaneous. The major investment avenues said above can be made through stock market where they get traded among buyers and sellers. In stock market there are several techniques that help for trading reducing the risk levels. The present study is made on the technical analysis approach. Through this approach an investor can know when to enter the market, exit the market and to withhold the position. They help us to know the bullish and bearish divergences in the stocks.

Key words: investment, risk, safety, equity market, private sector banks, relative strength index, moving averages, Bollinger bands

Introduction:

Savings and investment are two key macro variables which play a significant role in economic growth. Global emerging economies are experiencing record savings at a time when the developed world has been witnessing a decline in gross domestic saving rates. The best way to streamline the savings is through long-term investments in the equity markets by funding the corporate growth story. Over the past decade, India’s GDP has almost trebled from $414 billion in 2001 to $1.3 trillion in 2010.

The National Stock Exchange (NSE), the largest bourse in India, has witnessed a 25 per cent increase in active investors with the Western region recording the highest growth of 32 per cent in cash market participation in 2015. Though there is increase in GDP of the economy, the actual savings exposed through securities is 1.5% compared to that of 10% in china and 18% in US. At the time of 2015, around 70 percent of the market is dominated by foreign institutional investors. All this happens to a main reason that the savers of India are afraid of the risk factors of the stock market. Proper education and knowledge to the savers leads to a drastic change in the economy of India leading it to a potential super economy.

Investors have to be more careful in picking up of stocks and the time and quantity of the stocks. This can be helped by the stock picking strategies available. They are fundamental analysis, technical analysis, growth investing, GARP investing, income investing, value investing, CAN SLIM, Dogs of the Dow etc. The present study is on technical analysis approach. Technical analysis is a method of evaluating securities by analyzing the statistics generated by market activity, such as past prices and volume. Technical analysts do not attempt to measure a security's intrinsic value, but instead use charts and other tools to identify patterns that can suggest future activity.
Review of literature:

The present study is conducted on the techniques used to invest in the stock market. Several studies have been carried out in accordance to technical analysis while investing in various financial markets. Different variables have been drawn through the study of different articles. Some of them are

C Booblan (2014) says that “technical analysis predicts the trend of short and medium term price movements and helps the investors to select the right plan and to make right decisions to invest in the stocks. The investor also requires fundamental knowledge, which would provide a clear idea about the investment decision”. As per Hemal Pandya (2013) “for more accurate results in the movements of stock price predictions, fundamentals are even to be considered by the investor”, Mrs. J. Nithya, Dr. G. Thamizhchelvan (2014) believes that “for better understanding of price fluctuations an investor can depend on technical analysis that gives them right direction to go on further to buy or to sell the stocks. They must even consider various factors like Government of India budget, company performance, political and social events, climatic conditions etc. before taking an investment decision. The scrip should also be fundamentally good.” N R Benjamin Franklin (2012) mentioned that “the technical analysis studies the behavior of the stock price to determine the future price of the stock and he added that the stock price and stock price average is an important tool for investors. He suggested that the investors have to concentrate on all information of shares and not in moving average alone”. Brown and Jennings (1989) showed that “technical analysis has value in a model in which prices are not fully revealing and traders have rational presumptions about the relationship between prices and signals”

Sathya Varathan N and Tamlenthi (2012) stated “five rules for purchase and sale of the shares such as avoidance of greedy, avoidance of unnecessary tips, avoidance of timing of market, avoidance of sentiments, avoiding the panic while market drops”. Venkatesh C.K. (2013) through his study he concluded that “the majority of the respondents depend upon both fundamental and technical analysis to predict future price movements for making investment decisions. A significant positive correlation between economic factors and company’s management has also been observed”. Neftci (1991) showed that “few rules used in technical analysis generate well-defined techniques for forecasting. But they failed in predictions made through economic time series is Gaussian. Tests showed that this may indeed be the case for the moving average rule violation”. Cesari, R. And D. Cremonini, Gupta, (2003) conducted his study by examining a sample of middle class people in India, “the investors are mostly cautious about the fraudulent behavior of the company’s management, volatility and price manipulation while making investment decisions in an equity market”. Lui and Mole (1998) reports the results of a questionnaire survey conducted in February 1995 on the use of fundamental and technical analyses by foreign exchange dealers in Hong Kong. “Most of the dealers (nearly 85%) rely upon both fundamental and technical analyses while making investments. Though both are used, they depend completely on technical analysis in short investment proposals”. Cesari and Cremonini (2003) have made “an extensive simulation comparison of popular dynamic strategies of asset allocation depicts that only the technical analysis performs well in Pacific markets”.

Research problem:

Stock investment requires meticulous planning and careful evaluation of the underlying stock before making investment. A statistical data in the recent past indicated that 95 per cent of the investors in the stock markets are losers, since they undertake investment without any information and without discipline.

It is much required for the investors to study the market and to understand market psychology so that they can make optimal decisions

Need for the study:

Though there is a major contribution of stock market to the GDP, the percentage of active stocks is very low and the investment in stock market is just 2%. All this is due to the lack of awareness to the household investors about the stock market. This study helps the investors to get a view about the technical analysis approach to different stocks.
Objective of the study:
1) To study the long run and short run movements of the stocks.
2) To study the presence of bullish and bearish markets
3) To measure the bounce back or consolidation situations in the market

Methodology:

Research design: The study is completely descriptive in nature rather than analytical. It observes the price movements of different stocks and analyzes them based on graphical representation. The present study is conducted through the collection of open, high, low, close prices and volume of stocks traded for a period of 1 year of 10 companies i.e., from 1st August 2015 to 31st July 2016.

Geographical area: All the private banking companies that are listed in Indian Stock Exchanges

Population: All the listed private banking companies in the National Stock Exchange

Sample size: The sample size of 10 listed companies out of 18 companies listed in the National Stock Exchange

Sampling method: The sample of 10 companies is collected through random sampling method

Data collection: The required data for the study is completely collected through secondary sources like ProwessIQ databases, EBSCO databases, journals, articles, popular websites, etc.

Tools and techniques of the study: Relative Strength Index, MACD for 1 year, Bollinger Bands.

Data analysis:

The study is conducted by the use of techniques RSI, Bollinger bands and MACD for 1 year. RSI technique helps to know the bounce back and price reversals through the band width 0-100 calculated. Bollinger bands help to know the bullish and bearish divergences through the upper and lower bands calculated. MACD helps to know the price fluctuations in the past prices that help to predict the future. All these techniques help the investor to decide the entry, exit or withhold positions of different stocks.

RSI technique:

Axis bank

Figure – 1 the above graph depicts the relative strength index of Axis bank for the period 01-08-2015 to 31-07-2016

It is clearly evident that in the months of August, September, December and January there is an oversold situation which resulted in bullish divergence signaling to buy in the consecutive months respectively. We can see an overbought situation in the months of April to July due to a high demand
in stock. Here, we can observe a consolidation stage in the overbought region that broke out in the month of June.

City Union Bank

Figure – 2 the above graph depicts the relative strength index of City Union bank for the period 01-08-2015 to 31-07-2016

In the months of August and January the stock experienced an oversold situation but the situation of August was bounced back again to oversold region in the months of September and October. This helps the investors to take a decision to withhold the shares. The oversold situation of January showed a bullish divergence in the further months indicating a buy signal till the month of May. The demand has increased a lot to the share that resulted in an overbought situation in the months of May, June and July. Here, there is a sell signal in the month of June that helps to take a decision.

Federal Bank

Figure – 3 the above graph depicts the relative strength index of Federal bank for the period 01-08-2015 to 31-07-2016

There is an oversold situation in August and September where the price got consolidated to some extent and again reached oversold situation in the late October and November. We can observe sudden moments in the price. In the month of June and July there is an overbought situation with a sell signal in between.

HDFC Bank

Figure – 4 the above graph depicts the relative strength index of HDFC bank for the period 01-08-2015 to 31-07-2016

There is an overbought situation in the month of June.
Figure – 4 the above graph depicts the relative strength index of HDFC bank for the period 01-08-2015 to 31-07-2016

In the months of February and August, the stock experienced a oversold situation with a buy signal in the following months till February where it again experiences oversold situation. The stock has reached overbought situation only in the month of April further indicating a sell signal.

ICICI bank

Figure – 5 the above graph depicts the relative strength index of ICICI bank for the period 01-08-2015 to 31-07-2016

An oversold situation is experienced in the months of August, September, December, January and February indicating a bullish divergence in consecutive months with a buy signal. In the months of June and July there is a slight situation of overbought further indicating a sell signal.

IDFC bank

Figure – 6 the above graph depicts the relative strength index of IDFC bank for the period 01-08-2015 to 31-07-2016

There is a heavy fall of RSI below 30 reference line in the months of December and January following a bullish signal to buy stocks. In the month of April there is heavy demand to the stock which is above the reference line of 70. Later it signifies a sell signal to the stock.
Indusind bank

Figure – 7 the above graph depicts the relative strength index of Indusind bank for the period 01-08-2015 to 31-07-2016

The stock experienced buy signals in the months following August till February where it reached an oversold situation. In the months of April and May there is an overbought situation resulting in a sell signal and bearish divergence further.

Karurvysya bank

Figure – 8 the above graph depicts the relative strength index of Karurvysya bank for the period 01-08-2015 to 31-07-2016

There are heavy fluctuations in the price of stock where in September and October results in oversold and November, December, January, March, April, June and July in overbought region. There is a buy signal in the months of September, November, January and March. Sell signals in the months of December, April and May.

Kotak Mahindra bank
Figure – 9 the above graph depicts the relative strength index of Kotak Mahindra bank for the period 01-08-2015 to 31-07-2016

The stock never experienced a oversold situation in the time period of study i.e. august, 2015 to July, 2016. It experienced an overbought situation in December and may for a very slight moment. It helps to take a decision to with hold the stock.

**YES bank**

Figure – 10 the above graph depicts the relative strength index of Yes bank for the period 01-08-2015 to 31-07-2016

The stock has shown a bullish divergence in most of the months following augst till March. From the starting of March the stock experienced an overbought situation till July.

**Bollinger bands:**

**Axis bank**
Figure – 11 the above graph depicts the Bollinger bands of Axis bank for the period 01-08-2015 to 31-07-2016.

The closing price of stock broke through the upper band in the months of April and May indicating a resistance level and buy signal. In the month of January closing price broke through the lower band indicating a support to the price for no further fall and indicates a sell signal.

City union bank

Figure – 12 the above graph depicts the Bollinger bands of City Union bank for the period 01-08-2015 to 31-07-2016.

In the months of March and June the closing price broke through the upper band where there is a resistance level to the stock for further rise and indicates a buy signal. The price never broke the lower band. Hence, indicating to withhold the stock or to buy further.

Federal bank
Figure – 13 the above graph depicts the Bollinger bands of Federal bank for the period 01-08-2015 to 31-07-2016

In the month of September the closing line broke through upper band with a resistance to the price indicating buy signal. As the closing price never broke lower band there is no support to the price which may fall further. Hence, indicating no sell signals.

**HDFC bank**

Figure – 14 the above graph depicts the Bollinger bands of HDFC bank for the period 01-08-2015 to 31-07-2016

In the months of May and July there is a resistance to the price which broke the upper band line and indicating a buy signal. In the months of November and February the price earned a support level for no further fall of price indicating a sell signal.

**ICICI bank**
In the months of October, April, May and July the closing line broke the upper band indicating a buy signal. In the months of September, November, December, January and February there is a support to the price indicating a sell signal.

**IDFC bank**

![Graph showing Bollinger bands for IDFC bank]

In the months September, March, May and July the closing line broke the upper band indicating a buy signal. The sell signal is experienced in the months of November to February and June with a support to price.

**Indusind bank**

![Graph showing Bollinger bands for Indusind bank]

In the months of September, October, March and April there is a resistance in the price level that indicates a buy signal. Here, the closing line crossed the upper line. The closing line broke the lower band in the months of October, January and February indicating a sell signal.
KarurVysya bank

Figure – 18 the above graph depicts the Bollinger bands of KarurVysya bank for the period 01-08-2015 to 31-07-2016

The closing line broke the upper band in the months of December, January, March and June indicating a buy signal. The sell signal is observed in the months of September, October, January and February as the closing line crosses lower band.

Kotak Mahindra bank

Figure – 19 the above graph depicts the Bollinger bands of Kotak Mahindra bank for the period 01-08-2015 to 31-07-2016

In the months of October, November, December, January, April and May the closing line crossed upper band indicating a buy signal. In the months of August, January and February there are sell signals as the closing line crosses lower band.
Figure – 20 the above graph depicts the Bollinger bands of Yes bank for the period 01-08-2015 to 31-07-2016

Buy signals are observed in the months of September, October, November, January, May, June and July as the closing line crosses upper band. In the months of December and January the closing line crosses lower band that indicates a sell signal.

MACD technique:

Axis bank

Figure – 21 the above graph depicts the MACD movements of Axis bank for the period 01-08-2015 to 31-07-2016

The MACD line falls below signal line in the months of October, November, January, February, May and June indicating a bearish divergence. It indicates a sell signal. In the months of November, December, January, April and July the MACD line rises above signal line indicating a bullish divergence, signaling buy chances.
City Union Bank

Figure 22: The above graph depicts the MACD movements of City Union Bank for the period 01-08-2015 to 31-07-2016.

The MACD line rises above signal line in the months of October, December, February, May and July indicating a bullish divergence. In the months of October, November, January, April, June and July, the MACD line falls below signal line indicating a bearish divergence.

Federal Bank

Figure 23: The above graph depicts the MACD movements of Federal Bank for the period 01-08-2015 to 31-07-2016.

In the months of November, December, February, April and July the MACD line rises above signal line indicating a bullish divergence. In the months of October, December, January, April and June, the MACD line falls below signal line indicating a bearish divergence.

HDFC Bank

Figure 24: The above graph depicts the MACD movements of HDFC Bank for the period 01-08-2015 to 31-07-2016.

In the months of November, December, February, April and July the MACD line rises above signal line indicating a bullish divergence. In the months of October, December, January, April and June, the MACD line falls below signal line indicating a bearish divergence.
The MACD line rises above signal line in the months of December, February, March and July indicating a bullish trend of buy situation. The MACD line falls below signal line in the months of November, December, January, February and June indicating a bearish trend of sell situation.

**ICICI bank**

![ICICI Bank MACD Graph](image)

Figure – 25 the above graph depicts the MACD movements of ICICI bank for the period 01-08-2015 to 31-07-2016

In the months of October, December, January, April, May and June, the MACD line falls below signal line indicating a bearish divergence. It signals to sell the stocks. In the months of November, December, January, April, May and July the MACD line rises above signal line indicating a bullish divergence i.e. to buy more stock.

**IDFC bank**

![IDFC Bank MACD Graph](image)

Figure – 26 the above graph depicts the MACD movements of IDFC bank for the period 01-08-2015 to 31-07-2016

In the months of October, December, January, February, May and June, the MACD line falls below signal line showing a bearish trend to sell the stock. The MACD line rises above signal line in the months of November, December, February, March, May and July showing a bullish divergence to buy more stock.

**Indusind bank**

![Indusind Bank MACD Graph](image)
Figure – 27 the above graph depicts the MACD movements of Indusind bank for the period 01-08-2015 to 31-07-2016

In the months of October, December, January, April, May and June, the MACD line falls below signal line indicating a bearish trend. In the months of November, February, March and July the MACD line rises above signal line indicating a bullish trend.

KarurVysya bank

Figure – 28 the above graph depicts the MACD movements of KarurVysya bank for the period 01-08-2015 to 31-07-2016

The MACD line falls below signal line in the months of October, January, February and April indicating a bearish divergence. In the months of November, February, March and June the MACD line rises above signal line indicating a bullish divergence.

Kotak Mahindra bank
In the months of November, December, January, May, June and July, the MACD line falls below signal line indicating a bearish trend. In the months of November, December, March, May and July the MACD line rises above signal line showing a bullish trend.

**YES bank**

The MACD line falls below signal line in the months of November, December, January, February, April and June showing a bearish trend. In the months of November, December, January and March the MACD line rises above signal line indicating a bullish trend.

**Findings:**

1) In the Axis bank we could observe buy signals in the month of April and sell signal in the month of January. It signals bullish trends to buy more stocks in the periods of December and January and bearish trends in October, November, January, February, May and June.

2) In the Bank of city union there are no sell signals in the study period. There are sell signals in the months of May and June. In the month of October we could observe a bullish trend and in the months of June and July a bearish signal.

3) In the Federal bank, there are buy signals in the month of September. In November we could see a bullish trend and in June a bearish trend.

4) In the Bank of HDFC we can see buy signals in the months of May and July and sell signals in the months of November and February. In the month of February we could find a bullish divergence.

5) In the bank of ICICI we can observe buy signals in the months of April, May and July and sell signals in the months of September, November, December, January and February. In December and January we could see a bullish signal and in November we could see a bearish signal.

6) In IndusInd bank, there are buy signals in the months of September, March, May and July and sell signals in November to February. In January we can see a bullish trend.

7) In IndusInd bank, in the months of September, October, March and April there are buy signals and in October, January and February there are sell signals. In February we could see a bullish signal and in April and May a bearish signal.

8) In KarurVysya bank, in December, January, March and June there are buy signals and in September, October, January and February there are sell signals. In January we could see a bearish divergence.
9) In Kotak Mahindra bank there are sell signals in August, January and February and buy signals in October, November, December, January and April. There is a bearish divergence in the month of December.

10) In Yes bank, December and January signals to sell and the remaining months to buy and hold.

Suggestions:

1) Out of the 10 banks selected most of the banks experienced a buy signals in almost throughout the year.

2) Of all the banks, Yes bank is doing well in respect to its market performance. It has highest buy signals and lowest sell signals compared to that of all.

3) IDFC bank has large number of fluctuations compared to all other banks. Most of the bearish divergences occurred in the months of October, December and January.

4) The city union bank and federal bank does not show any sell indications through Bollinger bands.

5) Hence, the trade decisions are to be taken with compliance to other techniques too. One should not completely rely on any one technique.

Conclusion:

Technical analysis is a study of price fluctuations through charts or graphs to predict the future or to enable the chance to entry and exit market. Out of the 10 banks selected most of the banks experienced a buy signals in almost throughout the year. Of all the banks, Yes bank is doing well in respect to its market performance. It has highest buy signals and lowest sell signals compared to that of all. IDFC bank has large number of fluctuations compared to all other banks. Most of the bearish divergences occurred in the months of October, December and January. The city union bank and federal bank does not show any sell indications through Bollinger bands. Hence, the trade decisions are to be taken with compliance to other techniques too. One should not completely rely on any one technique.

References:


2) HemalPandya, (2013),“Technical Analysis for Selected Companies of Indian IT Sector”, International Journal of Advanced Research, Volume 1, Issue 4, 430-446, ISSN NO 2320-5407


11) https://in.finance.yahoo.com/q/hp?s=AXISBANK.NS&a=07&b=01&c=2015&d=06&e=31&f=2016&g=d
12) https://in.finance.yahoo.com/q/hp?s=CUB.NS&a=07&b=1&c=2015&d=06&e=31&f=2016&g=d
13) https://in.finance.yahoo.com/q/hp?s=FEDERALBNK.NS&a=07&b=1&c=2015&d=06&e=31&f=2016&g=d
14) https://in.finance.yahoo.com/q/hp?s=HDFCBANK.NS&a=07&b=1&c=2015&d=06&e=31&f=2016&g=d
15) https://in.finance.yahoo.com/q/hp?s=ICICIBANK.NS&a=07&b=1&c=2015&d=06&e=31&f=2016&g=d
16) https://in.finance.yahoo.com/q/hp?s=IDFC.NS&a=07&b=1&c=2015&d=06&e=31&f=2016&g=d
17) https://in.finance.yahoo.com/q/hp?s=INDUSINDBK.NS&a=07&b=1&c=2015&d=06&e=31&f=2016&g=d
18) https://in.finance.yahoo.com/q/hp?s=KARURVYSYA.NS&a=07&b=1&c=2015&d=06&e=31&f=2016&g=d
19) https://in.finance.yahoo.com/q/hp?s=KOTAKBANK.NS&a=07&b=1&c=2015&d=06&e=31&f=2016&g=d
20) https://in.finance.yahoo.com/q/hp?s=YESBANK.NS&a=07&b=1&c=2015&d=06&e=31&f=2016&g=d