



PREDICTING STOCK PRICES USING TECHNICAL ANALYSIS TOOL LIKE TREND LINE, SIMPLE MOVING AVERAGES AND FIBONACCI RETRACEMENT FOR SHORT TERM TRADING PROFIT

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Abstract

In the material below I have tried to explain how can be used Trend line, Simple Moving Averages Crossover and Fibonacci Retracement as an important tool to predict stock price movement to earn a short term trading profit. Trend line, Simple Moving Averages Crossover along with Fibonacci Retracement is applied for selected companies which would give the investor a sell signal or buy signal.

Keywords: Trend line, Simple Moving Averages, Fibonacci Retracement.

INTRODUCTION

The technical approach to investment then is a reflection of the idea that prices move in trends and that these trends are determined by the changing attitudes of investors towards a variety of economic, monetary, political, and psychological forces.

The art of technical analysis, for it is an art, is to identify trend changes at an early stage and to maintain an investment or trading posture until the weight of the evidence indicates that the trend has reversed. That means that Technical analysis deals in probabilities, never certainties.

A study of market character is a cornerstone of technical analysis, since reversals of price trends in the major averages are almost always preceded by latent strength or weakness in the market structure.

In this research paper researcher used trend analysis tools like simple moving averages and trendline to find out the trend reversal and Fibonacci retracement tool for entry and exit of that trend and to earn a short term trading profit.

REVIEW OF LITERATURE

“To Study the Trend and Behavior Analysis of Indian Equity Market Using Elliott Wave Principle and Fibonacci sequence” - Dr. Pooja Talreja at International Journal of Innovative Research in Science, Engineering and echnology, June 2014, Volume 3, Issue 6, ISSN: 2319-8753 in this research paper researcher studies that wave principle gives a fair idea about direction of trend reversal with target prices if combined with Fibonacci.

“How to use Fibonacci retracement to predict forex market” - Violeta Gaucan Journal of Knowledge Management, Economics and Information Technology, ISSN: 2069-5934 ScientificPapers.org in this research paper researcher studies Fibonacci Retracement trading is used in all markets Fibonacci retracement levels are an important part of technical analysis and should be incorporated into your trading system.

“Golden Cross or other Simple Moving Average Crossover Strategies ? A Critical Quantitative Review (of all possible SMA combinations)!” - WallStreetCourier.com, June 29th, 2014, Version 1.0 in this research paper researcher studies that most moving average crossover signals provide some form of maximum loss reduction in comparison to a simple buy and hold strategy, their ability to outperform the underlying market is limited.

Objective

- To analyze the share price behavior
- To study the current trend and current trend reversal by using technical analysis tool
- Technical Analysis on selected stocks and interpret on whether to buy or sell

Hypothesis

H0: Technical analysis tools like Trend Line, Simple Moving Averages and Fibonacci Retracement is use full to earn short term trading profit.

H1: Technical analysis tools like Trend Line, Simple Moving Averages and Fibonacci Retracement is not use full to earn short term trading profit.



Practical Significance

- Traders use this kind of technical analysis tool to earn short term trading profit.
- Traders also find out current trend of the stock.

Limitations

1. The study is constrained to limited stock only.
2. Only Technical analysis tool is used.
3. This study is based on secondary data only and not on primary data.

RESEARCH METHODOLOGY

The data collected for the study is secondary in nature. The objective of the study is make short term trading profit by using trend line, simple moving averages and Fibonacci retracement level.

The study period is different for different stock depends upon the trading parameters. For Technical Analysis, Secondary data the daily share price movements of the selected companies are taken.

CONCEPTUAL FRAMEWORK

▪ Trend Lines

A Trendline is a straight line connecting, a series of ascending bottoms in a rising market or the tops of a descending series of rally peaks. Those joining the lows are call up trendlines and those connecting the tops are referred to as down trendlines. When the price breaks above down trend line a trend change signal is given. The opposite is true for an uptrend line. Trendlines are an easy tool to understand, but should be used with a strong dose of common sense. It required experimentation and practice before the art of interpreting. Only trendline are not refer for to find the trend change with trendline other technical analysis tool also be consider.

▪ Simple Moving Averages

A simple moving Average is constructed by totaling a set of data and dividing the sum by the number of observations. The resulting number is known as the average, or mean average. In order to get the average to move, a new item of data is added and the first item on the list subtracted. The new total divided by the number of observations, and the process is repeated.

The most common applications of MAs are to identify the trend direction and to determine support and resistance levels. MAs also impart important trading signals on their own, or when two averages cross over. A rising MA indicates that the security is in an uptrend, while a declining MA indicates that it is in a downtrend. Similarly, upward momentum is confirmed with a bullish crossover, which occurs when a short-term MA crosses above a longer-term MA. Downward momentum is confirmed with a bearish crossover, which occurs when a short-term MA crosses below a longer-term MA. For this research paper short term simple moving average period is 15 days and for long term simple moving average period is 50 days.

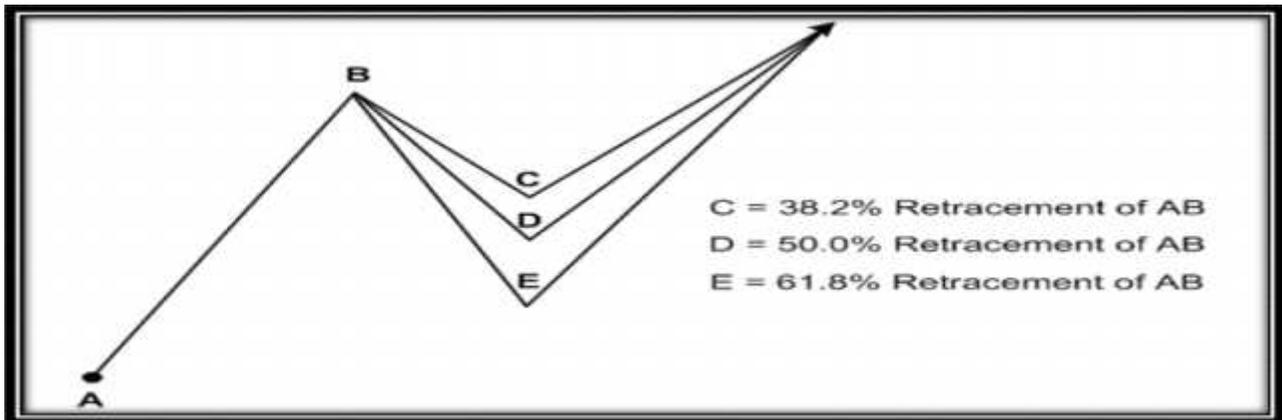
▪ Fibonacci Retracements

Before we learn more about the Fibonacci retracements, let's focus on price behavior for a minute. Let's start from one tricky question and the basics of price behavior. In which direction can price move? You will probably answer: up and down. This answer is correct, there is a "but" though. What if there is no main trend? If there is no strong trend, the price will probably move sideways. Statistics say that the price is moving about 30% of time in a trend and rest of this time it is moving in a range. Why is moving in a range such a bad thing? It is because there is no clear direction and the price moves up and down, so it is very hard to make money in this kind of movement.

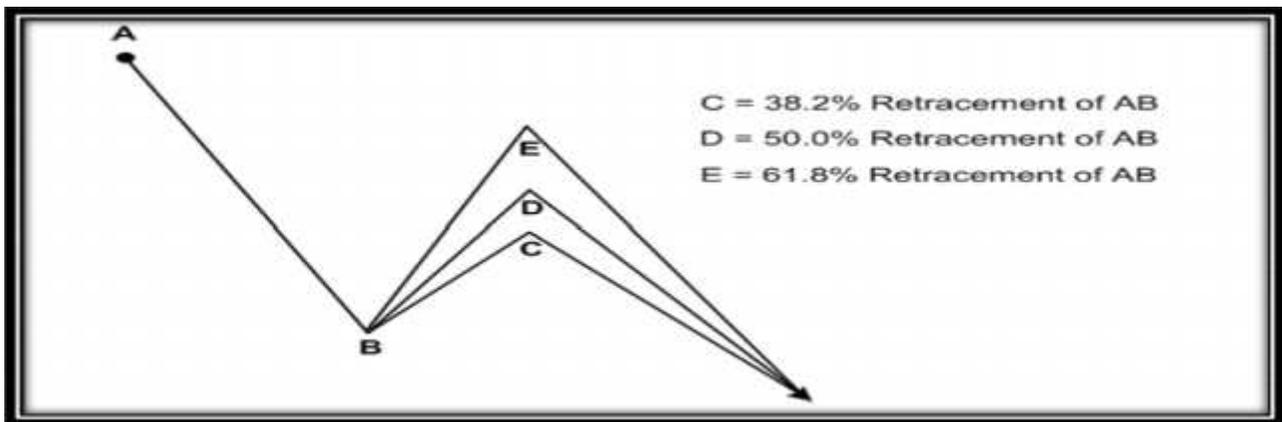
Movement of price to some point on the trading chart and then retracing back is known as Fibonacci Retracement. 0% is the lowest level in a Fibonacci sequence and 100% is the highest. The other most important Fibonacci Retracement levels are 38.2%, 50% and 61.8%. Support or Resistance levels for any currency exist at the points obtained by dividing the length of swing by ratios of figures such as .382, .50 and .618.

The 50% retracement level does not come from the Fibonacci sequence, but it's an important level. Traders tend to react when a price is near half of the previous swing, so they added it to retracement levels.

Representation of an uptrend in theory



Representation of a downtrend in theory



DATA ANALYSIS & INTERPRETATION



Above chart if you see that Trendline (T), Green line is 15 days simple moving averages (15 SMA) and Red line is 50 days simple moving averages (50 SMA) and Fibonacci retracement upline (FU). When ADANIPOWER stock price move above the Trendline and after that 15 SMA cross above the 50 SMA than price move up sharply this is the trend reversal sign but when price pullback that shown in FU line about 50% retracement level that is buying time for short term trader to make good amount of profit than price again move up till FU top price line that is exit time of this trade.

STOCK	BUY RATE	SELL AT FU TOP RATE	DIFFERENCE	PROFIT IN %	FU RETRACEMENT LEVEL	STOP LOSS (RISK)	DIFFERENCE	STOP LOSS IN %
ADANIPOWER	46.00	53.20	7.20	15.65	50.00%	44.30	-1.70	-3.70



Above chart if you see that Trendline (T), Green line is 15 days simple moving averages (15 SMA) and Red line is 50 days simple moving averages (50 SMA) and Fibonacci retracement upline (FU). When IDFC stock price move above the Trendline and after that 15 SMA cross above the 50 SMA than price move up sharply this is the trend reversal sign but when price pullback that shown in FU line about 50% retracement level that is buying time for short term trader to make good amount of profit than price again move up till FU top price line that is exit time of this trade.

STOCK	BUY RATE	SELL AT FU TOP RATE	DIFFERENCE	PROFIT IN %	FU RETRACEMENT LEVEL	STOP LOSS (RISK)	DIFFERENCE	STOP LOSS IN %
IDFC	149.90	165.80	15.90	10.61	50.00%	146.20	-3.70	-2.47



Above chart if you see that Trendline (T) , Green line is 15 days simple moving averages (15 SMA) and Red line is 50 days simple moving averages (50 SMA) and Fibonacci retracement upline (FU). When KTKBANK stock price move below the Trendline and after that 15 SMA cross below the 50 SMA than price move down sharply this is the trend reversal sign but when price pullback that shown in FU line about 50% retracement level that is selling time for short term trader to make good amount of profit than price again move down till FU low price line that is exit time of this trade.

STOCK	SELL RATE	BUY AT FD TOP RATE	DIFFERENCE	PROFIT IN %	FU RETRACEMENT LEVEL	STOP LOSS (RISK)	DIFFERENCE	STOP LOSS IN %
KTKBANK	142.00	127.40	14.60	10.28	50.00%	145.40	-3.40	-2.39



Above chart if you see that Trendline (T) , Green line is 15 days simple moving averages (15 SMA) and Red line is 50 days simple moving averages (50 SMA) and Fibonacci retracement upline (FU). When KTKBANK stock price move below the Trendline and after that 15 SMA cross below the 50 SMA than price move down sharply this is the trend reversal sign but when price pullback that shown in FU line about 50% retracement level that is selling time for short term trader to make good amount of profit than price again move down till FU low price line that is exit time of this trade.

STOCK	SELL RATE	BUY AT FD TOP RATE	DIFFERENCE	PROFIT IN %	FU RETRACEMENT LEVEL	STOP LOSS (RISK)	DIFFERENCE	STOP LOSS IN %
ZEEL	366.10	332.60	33.50	9.15	50.00%	374.30	-8.20	-2.24

CONCLUSION

Trend Line, Simple Moving Average Line gives a fair idea about direction of trend reversal with target price if combined with Fibonacci Retracement tool.

The present studies investigating that by using Trend Line, Simple Moving Average Line and Fibonacci Retracement tool stock price can be predicting and trader can earn short term profit for that 4 stock prices are studied out of 4 stock, 2 are buy(Long) trade and 2 are sell(Short) trade.

The research result indicate that Trend Line, Simple Moving Average Line gives a fair idea about direction of trend reversal with target price if combined with Fibonacci Retracement tool gives short term trading profit.

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