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Technical Analysis and Stock Market Return

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ABSTRACT *Moving averages and moving averages crossover is a significant technical analysis tool on any index or stock which helps to understand the price behavior of the shares, the signals given by them and the major turning points of the market price. Any investor or trader must certainly consider technical analysis as a tool whether to buy the stock at a particular point of time though it is fundamentally strong. This module studies application of technical analysis tools on selected index/stocks and interpret on whether to buy or sell them. This in turn would help investors to identify the current trend and risks involved with the scrip on par with market. The study is purely based on secondary sources which includes the historical data available from the website. For the purpose of analysis, Simple Moving average, moving average crossover is used for the analysis to know if the index/stock trend.*

KEYWORDS : Technical Analysis, stock market, market efficiency, India

Introduction

Technical analysis is the study of past price and volume patterns from charts in order to predict future price movements. The art of technical analysis is to identify patterns in price movements that will then anticipate in which direction prices will move in the future.The stock market indicators would help the investor to identify major market turning points. This is a significant technical analysis of selected companies which helps to understand the price behavior of the shares, the signals given by them and the major turning points of the market price. , technical analysis does not result in absolute predictions about the future. Instead, technical analysis can help investors anticipate what is likely to happen to prices over time. Technical analysis uses a wide variety of charts that show price over time.

Price movements more or less constant and tends to react to similar situations in consistent ways. By studying the nature of previous market trends, it is possible to identify future price pattern to develop an understanding of where the market is going to move in the future. Technical analysis therefore is based on the assumption that price movement patterns repeat. Technical analysis helps identify this patterns with the help of technical analysis tools and help market watchers to identify major junction, or turning points.

Technical analysis is that is helps investors and traders predict the trend of the market. Up trend, downtrend, and sideways moves of the market are easy to predict, with the help of chart analysis.Timing plays an important role in trading and investing. With the help of technical analysis, traders and investors can predict the right time to enter and exit a trade thereby enabling good returns. Chart patterns, candlesticks, moving averages, and other indicators are very useful for traders to make entry and exit points.Technical analysis gives early signals and also paints a picture about the psychology of investors and traders regarding what they are doing and gives an early signal when it comes to trend reversal.

The goal of this module is to provide knowledge about the simple and very important technical analysis tools moving average. And how it can be applied while selecting entry and exit point or stop loss in any index, stock or any other financial product. The basic essence is price movement patters repeat and any financial product that is liquid and traded on the exchange can be evaluated using techniques in this module. To be more accurate in judging the trend of the market or stock we use combination of 50 day moving, 200 day moving average. This helps to understand what the long term trend is and what the short term trend is and when both this trends are reversing. The aim is not to prove or disprove or justify technical analysis but to present with an opportunity to evaluate market or stock with the given tools to decrease odds while trading and investing.

This study is useful for anyone who wants to invest in financial market to identify the trend and entry exit point. This study can also be used by students who want to learn moving averages.

ii) Literature review

Technical analysis claims the ability to forecast the future trend of the asset prices through study of past market data. Many studies have been conducted on technical analysis applicability on various financial products. Goldberg and Schulmeister (1988) in their study examines the profitability of technical analysis in the foreign exchange market and stock market during 1970s and 1980s. Its purpose is to test whether excess profits are made using technical analysis tools. One major results of this study is that all of the technical rules examined are considerably more profitable with hourly data than they are with daily data. Neely, Paul and Dittmar (1997) in their study use technical analysis rules, to find strong evidence of economically significant out of sample excess returns to those rules for each of six exchanges rated over period 1981-1995. This report also tries to find out price movement patterns that are not captured by statistical models and find out profitability against the risk using bootstrap methodology in foreign exchange market. Bessembinder and Chan (1998) in their study investigate and provide simple forms of technical analysis contain significant forecast power for U.S. equity index returns.

Lo, Mamaysky and Wang (2000) intheir study highlight the presence of geometric shapes in historical price charts is often in the eyes of the beholder. Park and Irwin (2004) in their research work reviews the profitability of technical analysis. The report comprehensively reviews survey, theoretical and empirical studies regarding technical trading strategies. The survey literature indicates that technical analysis has been widely used by market participants in futures markets and foreign exchange markets, and that about 30% to 40% of practitioners appear to believe that technical analysis is an important factor in determining price movement at shorter time horizons up to 6 months. Larsen (2010) tried to predict the direction of future stock prices. And developed stock price prediction model and used a novel two-layer reasoning approach that employs domain knowledge from technical analysis in the first layer of reasoning to guide a second layer of reasoning based on machine learning. Based on a number of portfolio simulations with trade signals generated by the model.

Chitra (2011). The objective of this project is to make a study on the technical analysis on selected stocks of energy sector and interpret on whether to buy or sell them by using techniques. This in turn would help investors to identify the current trend and risks involved with the scrip on par with market. The stock market indicators would help the investor to identifymajor market turning points. This is a significance of technical analysis of selected companies which helps to understand the price behavior of the shares, the signals given by them and the major turning points of the market price. For Technical Analysis, the daily share price movements of the selected companies in NSE were absorbed for the 3 years i.e. 01-April-2007 to 31-March-2010. The closing prices of share prices were taken and the future price movement was analyzed using various tools like beta, RSI, Moving averages.

iii) Methodology

Moving average 50 day, 200 day and crossover

The study aims at analyzing the price movements of selected Index. For Technical Analysis, the daily share price movements of the selected of NIFTY for last 10 years. This Datais collected from secondly source. Information about trading tools is collected from various books, journals, magazines and websites. The study I conducted only on the CNX NIFTY index which is one of the major indexes in India. It is also the heavily traded index.

iv) Results and Discussion

The above 3 tools i.e. 50 day moving average, 200 day moving average and 50day & 200day moving average crossover is analysed below on NIFTY index for past 10 year period to confirm the it works in Indian markets.

50 Day Moving Average

A 50 Day Moving Average plotted on NIFTY chart shows shot term trend for trading. When the price falls below the 50 day moving average trader sell the stock to avoid big losses and they buy close to the 50 day moving average which also acts as a short term support for the market. 50 day moving average is cannot avoid noise that causes frequent trend change indication on the graph. Sometimes it may dip below the 50 day moving average line and the bounce back immediately as seen below. A 50 day moving average can quickly show change in trend.

In early 2008 a break below the 50 day moving average shows change in the NIFTY trend. Similarly in early 2009 price break upward indicating end of down trend and beginning of uptrend

200 Day Moving Average

50 day and 200 day moving average crossover

In moving averages crossover we determine change in trend when the fast moving average (50 day moving average) crosses the slow moving average line (200 day moving average). Uptrends is when 200 day moving average is breach upward and trend is down when 200 day moving average is broken downwards by 50 day moving average.

In the below NIFTY chat of past 10 year till year 2008 the 50 day moving average was moving above the 200 day moving average in 2008 it breached downward and the down trend in NIFTY continued till mid 2009 before the trend reversal. After that the market trend is mostly positive, 50 day moving average moving above the 200 day moving price line.

v) Conclusion

The results documented in the previous chapter show that the technical analysis tools help in understanding the trend of the index/stock and the major turning points. When this tools were tested on the CNX NIFTY. The 50 day moving averages helps in accessing the short term trend of the market and reversal of the short term trend when the trend line is breached. The 200 day moving average price shows the long term trend of the market. This also acts a very important support and resistance for the market. Many a time price in uptrend dips and touch the 200 day moving average line and the bounce back. Similarly it also acts as resistance in a down trending market. Prices pick up and touch the 200 day moving average line form below and fall down again. One the trend line is breach from any side it is seen as reversal of the on-going trend and start of a new trend. The moving averages crossover also acts a trend reversal signal.

By applying these tools on the last 10year CNX NIFTY candle stick chart we can observe that the major trend reversalhappening in early 2008 due to global financial crisis. The 5 year uptrend has changed into down trend which lasted for over a year. The uptrend which began after CNX NIFTY hitting an all time low can also be identified by using these tools. Similarly the major uptrend started in 2014 can also be seen on the chart.

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