A Review on Trading and Exports of Candlesticks

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ABSTRACT: Candlesticks are one of the most effective technical analysis tools available to traders. Candlestick charting dates back hundreds of years to Japan. It's a different way of looking at data than what's been established in Western societies. Candlestick charting has the benefit of allowing you to utilize the same methods and analysis as bar charts while also providing the variety and distinctive indications that candlesticks provide. The purpose of this investigation into the creation of candlestick patterns was to determine the many candlestick patterns and their accuracy. It will assist investors in determining if candlestick patterns are reliable while making trading decisions. This research is based on the Nifty index for the last five years. According to the past five years of the Nifty index, candlestick patterns are not 100 percent accurate. And technical indicators aren't particularly supportive of these trends. We may infer from this research that investors should examine other variables in addition to candlestick patterns. It aids in the improvement of precision. The use of open, high, low, and close prices to depict historical price movement of a particular underlying such as a stock, index, or commodity is known as Japanese Candlesticks. These candlesticks form patterns that are thought to predict future price movement. Despite the fact that the popularity of candles has grown significantly over the past decade, there is still no statistical proof that they are useful in a wide variety of situations. Using almost six decades of historical data from the Sample 500 index, we investigate the forecasting potential of the Shooting Star and Hammer patterns. In our research, we discovered that utilizing closing prices provided minimal predicting reliability, but that using a high price for the Shooting Star and a low price for the Hammer provided excellent forecasting reliability.

KEYWORDS: Technical Analysis, Technical Indicators, Candlestick Patterns, Bullish Patterns, Bearish Patterns.

INTRODUCTION

The purpose of this research on the development of candlestick patterns [1]is to determine the various candlestick patterns and their accuracy. It will assist investors in determining if candlestick patterns are reliable while making trading decisions[2]. This research is based on the Nifty index for the last five years. The research is being carried out for a month at 'THE STRATEGIST,' a stock brokerage company in Ernakulam.

One of the most common charting techniques used in technical analysis is candlestick charts[3]. Technical analysis is a securities analysis discipline that uses historical market data, mainly price and volume, to predict the future direction of prices. It is a method of detecting trend reversals early in order to develop a purchasing and selling plan.

A candlestick chart[4] is a kind of bar chart that is often used to depict price movements of an asset, derivative, or currency over a set period of time. It's a cross between a line chart and a bar chart, with each bar representing the range of price change over a certain time period.

Interval of time It's most often employed in stock and currency price pattern technical analysis. They resemble box plots on the surface, however they are unrelated. Munehisa Homma, a Japanese rice merchant who traded financial instruments, is believed to have invented candlestick charts in the 18th century. Steve Nison's book[5], Japanese Candlestick Charting Techniques, was the first to expose them to the Western world. Candlestick charts provide the same information as a standard bar chart, but they emphasize the connection between starting and closing prices. Candlestick charts have the benefit of highlighting trend weakness and reversal signs that might otherwise be missed on a standard bar chart. Candlestick charts are a good method to visualize price changes.

Technical analysis is a common technique for predicting future price movements of financial instruments in the financial sector[6]. It is the study of market behavior, mainly through the use of charts, in order to predict future price movements (Murphy, 1999). Historical prices are used to create charts, which may include other data like as volume and open interest.

Three key assumptions underpin this technological methodology:

- Everything is discounted by market activity. The market price has already discounted any relevant information that influences the security's price.
- Prices follow a pattern.
- History has a habit of repeating itself.

Based on premise #1, the technician simply uses charts to predict future prices since that is all that is needed. As a result of assumptions #2 and #3, it is feasible to predict future price patterns by analyzing historical data using charts. The technical method has had its fair share of detractors in the past. The most well-known example is the Efficient-market hypothesis (EMH)[7], which says that given publicly accessible information, it is impossible to consistently generate returns superior to those of the market on a risk-adjusted basis (Fama, 1970). While the veracity of EMH has been called into doubt, it is not our goal to prove or refute it.

Although empirical proof for the effectiveness of technical analysis is difficult to come by, its enormous popularity in the investing world cannot be denied. Stock charts featuring a number of technical indicators are available on popular financial websites such as Yahoo! Finance (Yahoo! Finance, n.d.), Google Finance (Google Finance, n.d.), MSN Money[8] (MSN Money, n.d.), and CNN Money [9](CNN Money, n.d.). Furthermore, such services enable users to create a variety of chart layouts that include not just closing prices but also other prices. one of the

Japanese Candlesticks[10], which are candles made utilizing open, high, low, and closing prices, are one of the most popular designs. When these candlesticks are drawn on a chart, they reveal patterns that are thought to help predict temporary peaks, bottoms, continuations, and reversals. Our research focuses on the efficacy of Japanese Candlesticks.

Technical analysis is extensively utilized by forex, stock, and commodities traders to identify market patterns in the short and long term. Every day, the scope of technical analysis expands as more individuals attempt to acquire the abilities of technical analysis in order to make a decent living. Candlestick patterns' use as a tool in technical analysis;

- It aids investors and traders in predicting market trends. With the assistance of chart analysis, it is simple to forecast the market's uptrend, downturn, and sideways movements.
- When it comes to trading and investing, timing is crucial. Traders and investors may use candlestick patterns to forecast the best moment to join and leave a transaction, resulting in higher profits. Traders may utilize chart patterns, candlesticks, moving averages, Elliot wave analysis, and other indicators to make entry and exit decisions.
- Candlestick patterns provide early indications as well as a snapshot of how investors and traders think about what they're doing. Price-volume analysis also reveals market makers' movements and actions in relation to a certain market.
- Traders that utilize 1 minute, 5 minute, 30 minute, and 1 hour charts benefit from candlestick charts since they provide a fast result. In contrast to daily charts, the development of a head and shoulder on a 1 minute and 5 minute chart yields quick results.

Technical charts offer a wealth of information to traders and investors, allowing them to create positions and execute trades. Support, resistance, chart patterns, market momentum, volatility, and trader psychology are just a few examples of the kinds of information given by technical analysis and utilized by Forex traders.

The goal of our research was to see whether Japanese candlesticks might foretell the future by looking at the Shooting Star and Hammer patterns, which have been given importance in the literature. For example, in an uptrend, a Shooting Star is said to predict a temporary peak price, after which the price would go lower. To verify that hypothesis, we wanted to compare the occurrences of this pattern to previous data and do a statistical analysis to see whether the theory was correct.

In this research, we looked at the Shooting Star in both uptrending and non-uptrending situations. Similarly, we looked at the Hammer in situations with downtrends as well as all eventualities.

Candlestick charts:

A candlestick chart is a kind of bar chart that is often used to depict price movements of an asset, derivative, or currency over a set period of time. Each bar shows the range of price change over a particular time period, and it is a mix of a line chart and a bar chart. It's most often employed in stock and currency price pattern technical analysis. They resemble box plots on the surface, however they are unrelated.

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There are two different types of candlesticks:

- A bullish candle: is one in which the closing exceeds the open (usually green or white)
- A bearish candle: is one in which the closing is less than the open (usually red or black) A candlestick model is shown below.

Japanese candlesticks were first created in the 18th century in Japan, and were used by Japanese investors to predict rice price changes. Despite the fact that Japanese Candlestick Charts have been used in Japan for more than 200 years, they were practically unknown in the West until Steve Nison introduced them in 1990. (Nison, the Candlestick Course, 2003).

Japanese Candlesticks have grown in popularity since Nison's debut and the advent of the World Wide Web. For technical stock analysis, they are now widely incorporated in most software packages and websites.

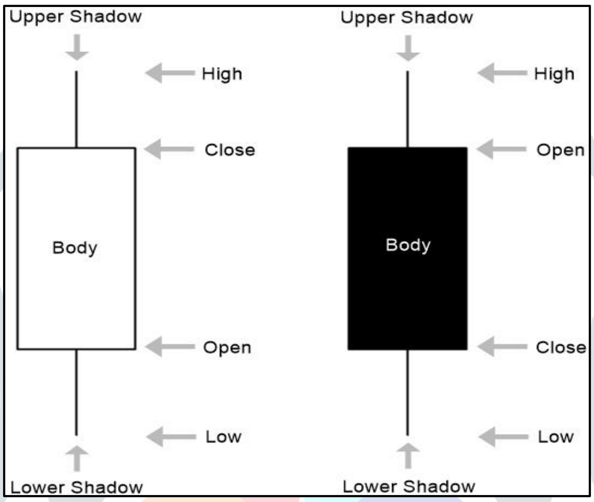

Fig 1: Model of Candlestick

2.2 Candlestick Patterns

The power of Candlestick Charts is with multiple candlesticks forming reversal and continuation patterns. Following are the different candlestick patterns used in technical analysis:

- Bullish Engulfing Pattern
- Bearish Engulfing Pattern
- Dark Cloud Cover
- Doji
- Dragonfly Doji
- Evening Star
- Gravestone Doji
- Hammer
- Hanging Man
- Harami
- Inverted Hammer
- Morning Star
- Piercing Pattern
- Shooting Star
- Tweezer Tops and Bottoms
- Windows

CONCLUSION:

The primary goal of this research on candlestick patterns is to discover different candlestick patterns, determine their correctness, and locate the indications that support them. The study looked at various candlestick patterns over the last five years and came to the conclusion that candlestick patterns are not 100 percent reliable, and that they are created with the help of technical indicators. As a result, users of candlestick patterns should think about additional variables to enhance candlestick pattern accuracy. One essential thing to remember is that in technical analysis, there are additional, more precise technical instruments accessible. This course teaches you all you need to know about candlestick patterns and technical indicators.

Following scope of the study to Investors:

- Candlestick patterns and other technical indicators should be well-understood by investors.
- Investors should think about other variables that influence market fluctuations.
- Traders do not have to wait for candlestick patterns to appear. Because a five-year examination of the Nifty index has shown that candlestick patterns occur seldom.

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