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A STUDY ON SUCCESS RATE OF CANDLESTICKS WHEN TRADING IN MAJOR COMMODITY LIKE CRUDE OIL

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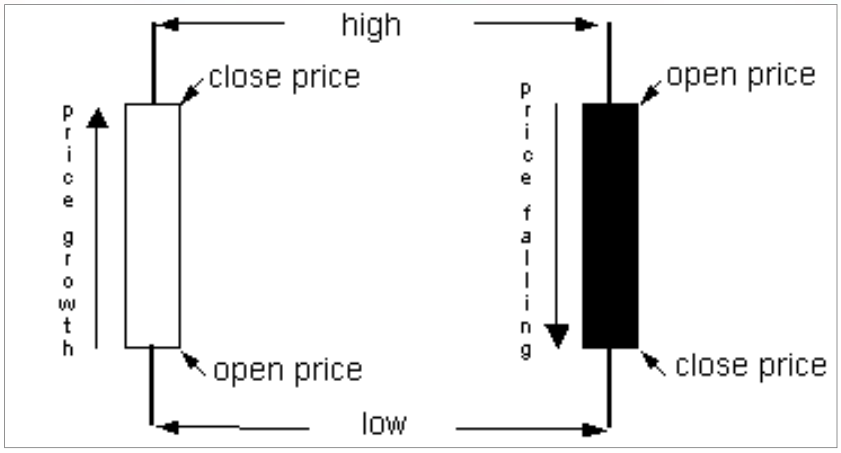
A candlestick is a type of Charts used under Technical analysis. It conveys the same information represented in bar charts, but are visually displayed differently. The Open, High, Low and Close of the chosen trading period will be represented in a single candle.

Historically, candlestick charts are the oldest form of charts that have been used for predicting prices of rice. During this era in Japan, Munehisa Homma became legendary by making a fortune in the rice trade using candlestick analysis. He is said to have performed over 100 consecutive winning trades with this method.

The following diagram illustrates the formatting of a Candlestick.



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The body of a candlestick is referred to as the real body and it represents the range between the opening price and the closing price.

This type of chart is used to represent each time period in a candlestick format. Just like with a bar chart, the candlestick chart will display the Open, High, Low and Close of a chosen period of time. Candlesticks can be either solid or transparent, depending on the similarity of the opening and closing price. When the closing price is higher than the price at the open of the market, the candlestick will be represented as transparent or empty.

If the market price closed lower than what it opened at, the candlestick will be solid or filled in. Two lines that extend vertically above or below the real body of the candlestick, represent the highs and lows during the time period, but do not reflect the closing price. These lines are referred to as shadows with the upper shadow representing the highest prices and the lower shadows indicating the lowest prices.

If the body of the candlestick is black or filled in, it indicates that the close during the chosen time period was lower than the price at which the market opened at. This generally indicates a bearish market. If the market closes at a higher price than at what it

opened at, the body of the candlestick will be white or open and it indicates a bullish market.

Candlestick charts possess three major advantages over standard bar charts.

1. They are more "visually immediate" than standard bar charts. After you get accustomed to reading them, they make it much easier to see exactly what occurred during the specific time period.
2. When using a bar chart, you have to fill in the price actions mentally. Since candlesticks are either filled in or transparent, you no longer have to waste time figuring out what actions the prices took during the time period.
3. Candlestick charts allow you to quickly spot trends in market prices by simply observing the color and you can easily see what the stock did during the time period.

Most importantly, candlesticks provide a vital way to spot reversals. These reversals are generally short term changes that are exactly the type of change that swing trader's watch for. When a traditional technical analysis talks about reversals, it is usually referring to formations that occur over a long period of time. Common reversal patterns include the "double top" and the "head and shoulders" patterns. And, by definition, these reversals involve smart money that is distributing their shares to more naive traders, the process normally take weeks or even months to occur.

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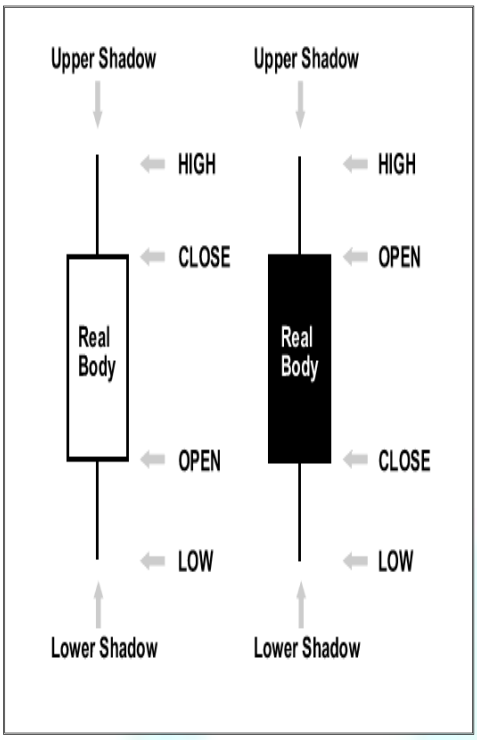

Candlesticks are also able to pick up on any changes in market trends that occur at the end of each market swing fairly accurately. They will often warn you of any impending changes if you pay close attention to the chart.

Candlesticks are formed using the open, high, low and close. If the close is above the open, then a hollow candlestick (usually displayed as white) is drawn. If the close is below the open, then a filled candlestick (usually displayed as black) is drawn. The hollow or filled section of the candlestick is called the *real body* or body. The thin lines poking above and below the body display the high/low range and are called shadows. The top of the upper shadow is the “high”. The bottom of the lower shadow is the “low”.

REVIEW OF LITERATURE

Marshall Young and Rose (2005) study the Candle pattens in actively traded stocks listed in the DJIA . The sample includes data from 1992-2002, the starting year is selected to

make sure that market participants had basic background of the different Japanese candle trading rules and they already started using them at that time in their trading strategies. The sample includes 28 candle patterns that fall under four main categories:bullish single line, bullish reversal patterns, bearish single lines and bearish reversal patterns to test the results, they used the bootstrap methodology to generate random prices of , open, high, low and close. Contrary to the researchers expectations, the final results show no evidence of profitable candle patterns to DJIA, thus supporting the weak form of the EMH.

Lana Zhanga and Xiong (2011) developed a model that visualizes Japanese candlesticks patterns in Chinese stock markets. The model transforms the prices of open, close, high and low into “Fuzzy” Candlecharts.

The above studies carried out at International level there is no specific research on candlesticks on Indian Commodity markets hence the researcher proposes to do research on this study on Indian commodity markets especially on crude oil as the price is tend to fluctuate quite often and highly risky.

STATEMENT OF THE PROBLEM

The emergence and growth of derivative market has been witnessed by increased risk in the financial market. The derivatives market hedge the risk of traders, by providing a risk management tool in the market. It is characterized by high volatility in terms of prices and volume of contracts in the market. The commodity derivatives are the first instrument used to secure the farmers and respective business merchants by protecfting

them against the price risk. Identifying the right tool to hedge will help the participants to get better profits.

NEED AND IMPORTANCE OF THE STUDY

Commodities markets, both historically and in modern times, have had tremendous economic impact on nations and people. Energy commodities such as crude are closely watched by countries, corporations and consumers alike. Although the quality of product, date of delivery and transportation methods were often unreliable, commodity trading was an essential business strategy. Commodities can quickly become risky investment propositions because they can be affected by eventualities that are difficult, if not impossible, to predict. Hence the researcher took a commodities viz., crude oil.

OBJECTIVES OF THE STUDY

- To study the volatility in commodity prices for commodity i.e.crude oil for different time intervals
- To identify the best market opportunities when trading in commodity i.e. crude oil
- To identify the success rate of doji,hammer,invertible hammer when trading in commodity likc crude oil
- To identify the overall success rate of candlesticks when trading in commodities like crude oil

SCOPE OF THE STUDY

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With globalization and innovation in the commodity markets at its peak - it is very essential to study the market risks and requirements. Over the years, the India commodity market has undergone major changes to remain at par with the global peers. With global trade getting more dynamic day by day, the India commodity market is not far behind to experience these developments. Commodities markets, both historically and in modern times, have had tremendous economic impact on nations and people. The impact of commodity markets throughout history is still not fully known.

RESEARCH METHODOLOGY

DATA USED FOR THIS STUDY

Secondary data were used for this study. Data were collected through trading system of Multi Commodity Exchange.

SAMPLING DESIGN

Stratified sampling method was used for this study.

SAMPLING METHOD

Stratified sampling method was used for this study. 50 samples from each Hammer, Inverted Hammer and Doji type of trading on crude oil was taken for this study.

STATISTICAL METHODS USED

Simple statistical tool viz., Percentage method and Accounting tool viz., Profit methods were used for this study.

PERIOD CHOSEN FOR STUDY

The period chosen for this study is from

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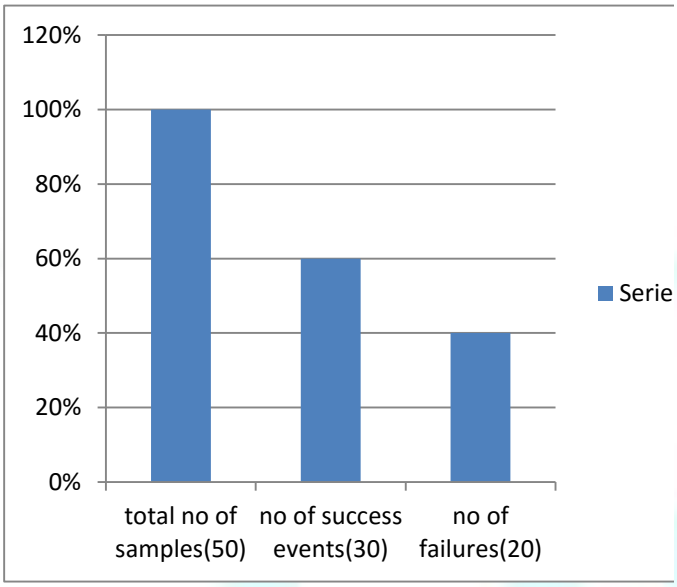
10/2/2015 to 3/3/2015. Secondary data was collected during Intra day transactions on the particular day

Chart no 1:- success rate of hammer



Sour ce: Secondary data

Table no 1.2:- Calculation of net proit;-

gross profit	gross loss	net profit
14700	10700	4000

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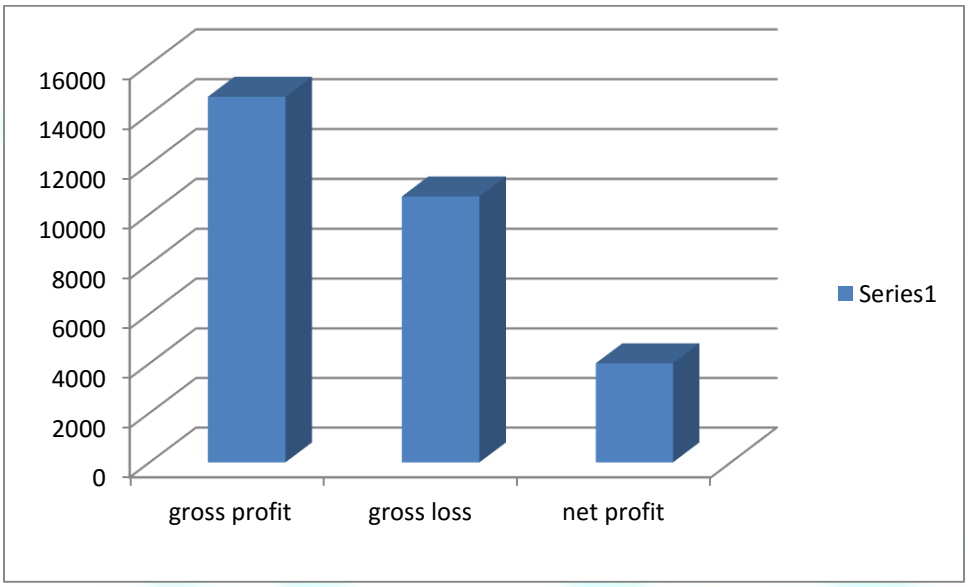
Sour ce; Secondary data

Chart no 2:-net profit of hammer



Sour ce; Secondary data

INTERPRETATION:

From the above table we found that the rate of crude oil hammer is @4000

Table no 2.1:- success rate of inverted hammer

total no of samples(50)	no of success events(34)	no of failures(16)
100%	68%	32%

Chart no 2:- success rate of inverted hammer

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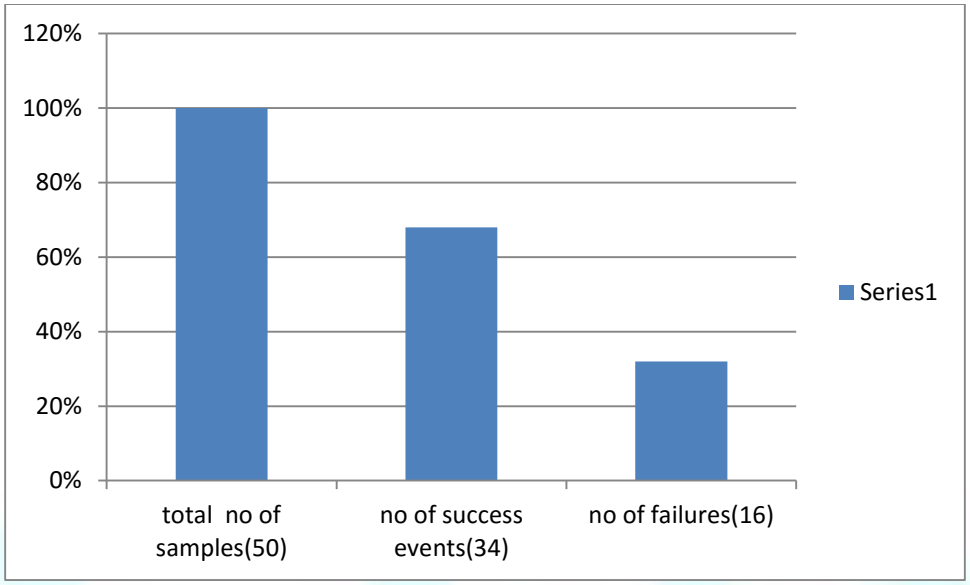


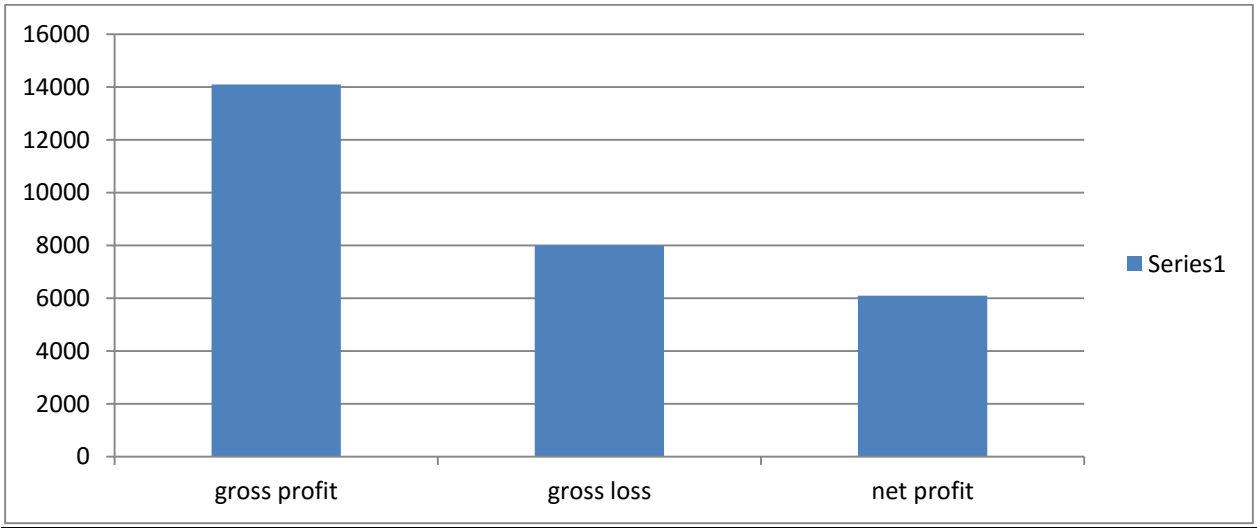
Source: Se condary data

Table no 2.2 net profit of inverted hammer

gross profit	gross loss	net profit
14100	8000	6100

Source: Secondary data

Chart no 4:- net profit of inverted hammer



Source: Secondary data

INTERPRETATION:

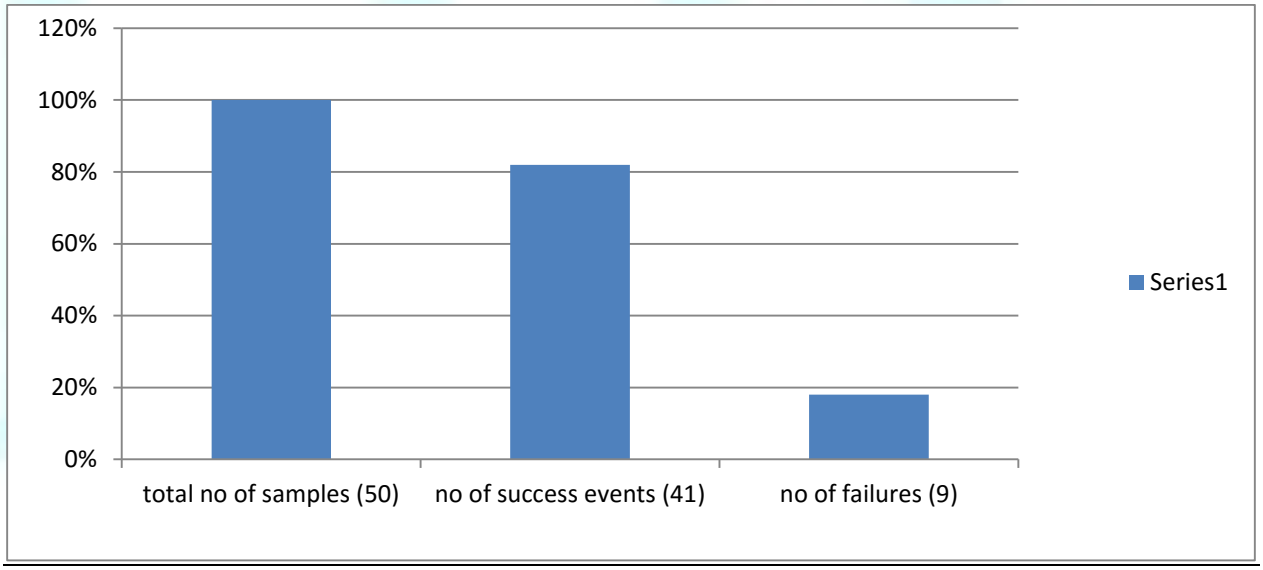
From the above table we found that the rate of crude oil invertable hammer is @ 6100

Table no 3.1:-success rate percentage on doji:-

total no of samples (50)	no of success events (41)	no of failures (9)
100%	82%	18%

Source: Secondary data

Chart no 5;- net profit of doji



Source: Secondary data

Table no 3.2:- Calculation of net profit:-

gross profit	gross loss	net profit
14400	-2900	11500

Source: Secondary data

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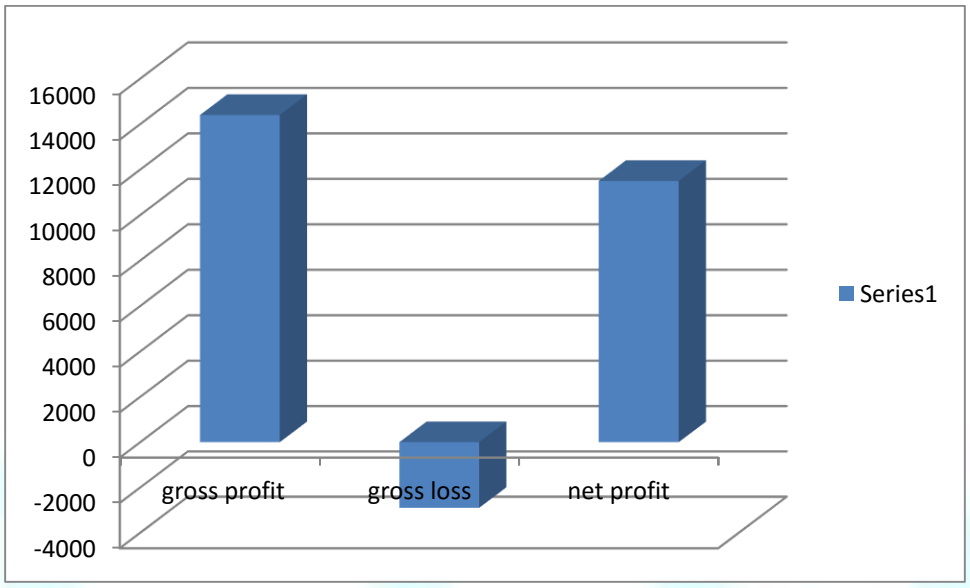
Chart no 6:- net profit of doji



Source; Secondary data

INTERPRETATION:

From the above analysis researcher found that the success rate of cride oil at doji is @11500

6.1 Findings:

- The crude oil is getting 70% success rate and 30% failure rate.
- The crude oil is getting 21600/-net profit and the calculation part the gross profit is 43200/- and gross loss is 2160.

6.2 Suggestions:

- Researcher suggested to the trader to use candlestick for his intraday trading based on his capabilities.

Researcher suggested to the trader to trade with lesser risk taking capabilities to use candlesticks for his intraday trading

- Researcher suggested the trader who is expecting higher returns to use candlesticks for his intraday trading

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Researcher suggested the trader who is using candlesticks to maintain proper accounts.

CONCLUSION:

India is one of the top producers of a large number of commodities, and also has a long history of trading in commodities and related derivatives. The commodities derivatives market has seen ups and downs, but seem to have finally arrived now. The market has made enormous progress in terms of technology, transparency and the trading activity. Interestingly, this has happened only after the Government protection was removed from a number of commodities, and market forces were allowed to play their role. This should act as a major lesson for the policy makers in developing countries, that pricing and price risk management should be left to the market forces rather than trying to achieve these through administered price mechanisms.

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