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A STUDY ON SUCCESS RATE OF CANDLESTICK USING BASIC PATTERNS OF JAPANESE CANDLESTICK ANALYSIS IN INDIAN DERIVATIVE MARKET

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Abstract

Candlestick is the most prevalent analysis tools and currently most of technical analysis programs use candlestick as a default approach of their charting programs. The patterns of candlestick can help traders to anticipate future prices of their portfolios. In this study, the researcher tried to identify which candle stick pattern will be valuable for the investors based on the timing of holding periods using comparison of selected three company stocks. In this paper, the researcher tested the three component stocks of IT companies chosen from index companies during May-July 2013 and used statistical tool ANOVA to examine which candlestick will be the most profitable based on their own type. The researcher selected five signal based on the different candlestick patterns because it is the most candlestick signal patterns that appear in Indian National Stock Exchange.

Keywords: Patterns of Japanese Candlestick Analysis, Indian Derivative Market, stocks of IT companies

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INTRODUCTION

Derivative means a forward, future, option or any other hybrid contract of pre determined fixed duration, linked for the purpose of contract fulfillment to the value of a specified real or financial asset or to an index of securities.

Derivatives Markets

Derivatives markets broadly can be classified into two categories, those that are traded on the exchange and those traded one to one or 'over the counter'. They are hence known as

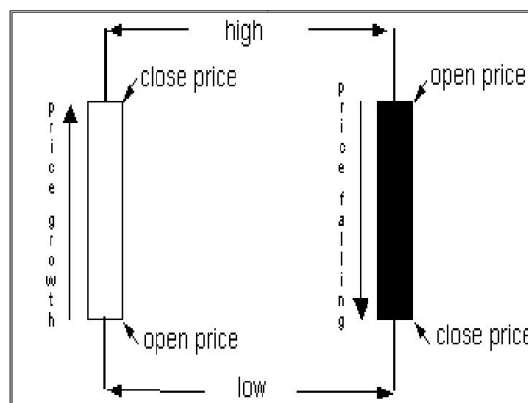
- Exchange Traded Derivatives
- OTC Derivatives (Over The Counter)

THEORETICAL REVIEW OF LITERATURE

Candlestick charts basically convey the same type of 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.

A candlestick chart is much more appealing visually than the standard bar charts. However, both charts require four elements for construction, the Open, High, Low and Closing prices for any given period of time.

Below are several examples of candlesticks and a definition for each of the components. 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.



INTRODUCTION TO CANDLESTICKS

The best way to explain is by using a picture: 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”.

STOCK INVESTING BASICS OF JAPANESE CANDLESTICKS

Candlestick trading analysis does not require knowing intricate formulas or ratios. Candlestick analysis does not require massive amounts of education to effectively utilize the signals. The stock investing basics of Japanese Candlesticks result in clear and easy to identify patterns that demonstrate highly accurate turns in investor sentiment. The average investor does not have to be dependent on the investment professional, a professional whose recommendation does not always have your interest at the forefront. Whether totally unfamiliar with investment concepts or very sophisticated in investment experience, the Japanese Candlestick trading formations are easily utilized. The signals and patterns are easy to see. As illustrated, a stock price closing higher than where it opened will produce a white candle. A stock price closing lower than where it opened creates a black candle. The boxes formed are called "the body". The extremes of the daily price movement,

represented by lines extending from the body, are called "shadows or tails."

CANDLESTICK PATTERNS

Basically there are five different patterns of candle stick are there .They are

- Doji
- Hammer
- Inverted Hammer
- Bullish Engulfing
- Bearish Engulfing

DOJI

The doji is a commonly found pattern in a candlestick chart of financially traded assets (stocks, bonds, futures, etc). It is characterized by being small in length-meaning a small trading range-with an opening and closing price that are virtually equal. The doji represents indecision in the market. A doji is not as significant if the market is not clearly trending, as non-trending markets are inherently indicative of indecision. If the doji forms in an uptrend or downtrend, this is normally seen as significant, as it is a signal that the buyers are losing conviction when formed in an uptrend and a signal that sellers are losing conviction if seen in a downtrend.

FORMATION OF DOJI IN MULTI COMMODITY EXCHANGE



HAMMER

A hammer sometimes indicates a bullish reversal. This is a bullish line if it occurs after a significant downtrend. If the line occurs at a significant up-trend, it is called a hanging man. A hammer is identified by a small real body (i.e., a small range between the open and closing prices) and a long lower shadow (i.e., the low is significantly lower than the open, high, and close).the body can be empty or filled-in.

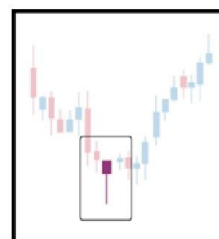


Fig. Hammer

INVERTED HAMMER

A candlestick chart pattern that occurs when a security had been declining in previous sessions, and the temporarily trades high throughout the day's session, but by the end of the day the market realized it could not support that level of trading and returned to a low level, closing below its opening price. When charted, the inverted hammer appears identical to the shooting star pattern.

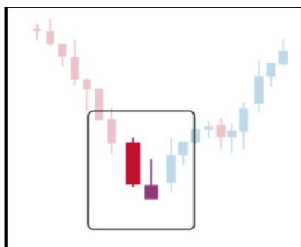
BULLISH HAMMER

- After an established downtrend
- Hammer candles have a small real body that forms at the upper end of the day trading
- The candle can be either blue or red, analyst usually do not differentiate
- Lower wick at least twice as long as the real body
- No (or almost no) upper wick
- After a bearish sell-off a significant rally brings price back up creating a long bottom wick. By the day end buyers are able to push prices back to the upper range creating a short body.

FORMATION OF HAMMER IN MULTI COMMODITY EXCHANGE



The Hammer pattern signifies a weakening in bearish sentiment. The long lower wick signifies an initial continuation of the downtrend. However, renewed buying sentiment acts as support and drives the price higher to close near its opening price.



The strength of a Hammer formation depends on where it appears. If a hammer forms near support levels, then the likelihood of a strong bullish reversal is high. However, if the hammer forms in the middle of a trading range it tends to have little significance. In ideal conditions traders want the wick length to be several times longer than the body of the candle.

The longer the candle, the more buyers were able to drive price back up and the stronger the bullish signal this candle provides.

Although above we state that most analysts do not care if the small candle is red or blue, traders will actually take a blue candle to suggest a stronger bullish signal. Buyers being unable to bring the close price above the open price suggest additional bullish strength. Generally the difference between blue and red candles is minimal. The bullish Dragonfly Doji serves as a stronger buy signal than the Hanging Man pattern. Since a Dragonfly candle (where open and close are identical, but we see a low similar in length to the Hanging Man) reflects more uncertainty and lack of direction, candlestick analysts will usually take it as a stronger buy signal.

BULLISH INVERTED HAMMER CANDLESTICK

- Day-one is a red day, continuing an established trend and closing at the lower trading range near the day low.
- The second day is red or blue day that also trades at a lower range with the opening and closing near each other.
- The upper wick of the second day should be at least twice as long as the body, the lower wick of the second day should be non-existent or very little.

The Inverted Hammer appears in a market that opens at or near its low, creating a candle with a small real body. During the day buyers rallied price fairly high, but were unable to sustain the rally. In a market characterized by a downtrend, bulls are able to rally price up briefly, but not enough to close above the day open. This can be a warning for shorts to anticipate a further, more sustainable bullish rally. The reversal trend is confirmed by bullish moves the next day.

FORMATION OF INVERTED HAMMER IN MULTI-COMMODITY EXCHANGE



In day-three the higher the candle holds above day-two's body, the more likely the shorts will cover their positions, hence leading to the weakening of a bearish market. Many bottom pickers will start longing the market once that occurs, leading to a bullish reversal.

BULLISH ENGULFING

When the bullish signal occurs, it means that the sellers are overwhelmed and the buyers are ready to jump back in and take control.



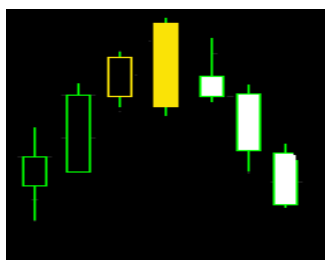
The demand is greater than the supply, in other words. The name comes from the second day of trading stock when the second candle engulfs the body of the first candle, while closing near the top of the range. A bullish engulfing pattern is a two-candle bottom reversal pattern that signals the end of a downtrend. It may reverse into an uptrend or change to a sideways trend; in either case it signals a trend change. This pattern occurs when there is a downtrend underway and should appear when a bottom has been reached.

FORMATION OF BULLISH ENGULFING IN MULTI COMMODITY EXCHANGE



BEARISH ENGULFING

A bearish engulfing pattern is the inverse of the bullish engulfing pattern and occurs in an uptrend.



Below are the characteristics of a Bearish Engulfing

- Only valid if it occurs in an uptrend
- First candle is bullish, second candle is bearish (different colors)
- Second candle's real body engulfs first candle's real body (ignore wicks)
- **Bonus** if volume is heavy on second candle
- **Bonus** if first candle's real body is small in comparison to the second candle's real body
- **Bonus** if second candle engulfs more than one candle
- **Bonus** if second candle's High/Low engulfs first candle's High/Low

FORMATION OF BEARISH ENGULFI IN MULTI COMMODITY EXCHANGE



SUMMARY OF CANDLESTICKS

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".
- Long bodies indicate strong buying or selling. The longer the body is, the more intense the buying or selling pressure.
- Short bodies imply very little buying or selling activity. In street forex lingo, bulls mean buyers and bears mean sellers.
- Upper shadows signify the session high.
- Lower shadows signify the session low.
- Candlesticks with a long upper shadow, long lower shadow and small real bodies are called spinning tops. The pattern indicates the indecision between the buyers and sellers
- Marubozu means there are no shadows from the bodies. Depending on whether the candlestick's body is filled or hollow, the high and low are the same as its open or close.
- Doji candlesticks have the same open and close price or at least their bodies are extremely short.
- The hammer is a bullish reversal pattern that forms during a downtrend. It is named because the market is hammering out a bottom.
- The hanging man is a bearish reversal pattern that can also mark a top or strong resistance level.
- The inverted hammer occurs when price has been falling suggests the possibility of a reversal.
- The shooting star is a bearish reversal pattern that looks identical to the inverted hammer but occurs when price has been rising.

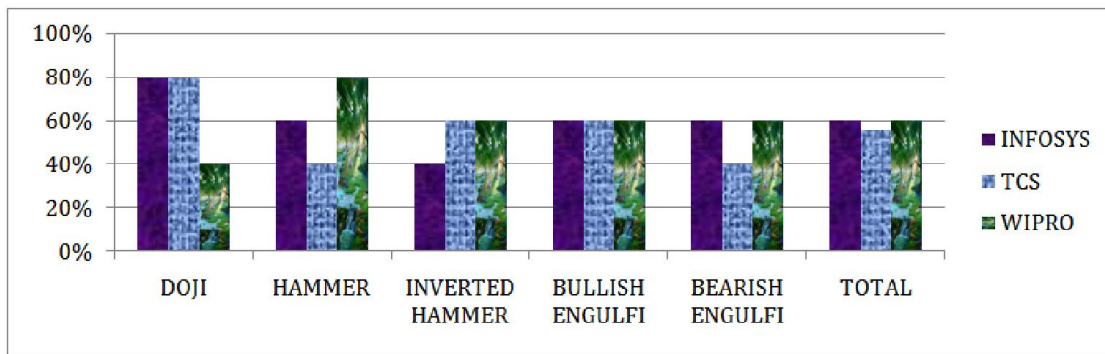
NEED FOR THE STUDY

Derivatives market provides a good source of investment where investors do not come forward to invest due to lack of proper information and high risk. Hence there arises a need to the descriptive study of commodities.

Table 1. Comparative statement of the success rate under different Candlestick patterns of selected IT companies over the study period

The trend of the market is to be observed	For Doji, Hammer and Inverted Hammer	For Bullish Engulfing and Bearish Engulfing
<i>If the market trend is upward</i>	then target will be Target= High + (High - Low)	then target will be Target= High + (Open - Close)
<i>If the market trend is downward</i>	then target will be Target= Low - (High - Low)	then target will be Target= Low - (Open - Close)

Graph 1. The success rate under different Candlestick patterns of selected IT companies over the study period



COMPANY	DOJI	HAMMER	INVERTED HAMMER	BULLISH ENGULFING	BEARISH ENGULFING	TOTAL
INFOSYS	80%	60%	40%	60%	60%	60%
TCS	80%	40%	60%	60%	40%	56%
WIPRO	40%	80%	60%	60%	60%	60%

Table 1. Success Rate of DOJI on INFOSYS

INFOSYS				INFOSYS			
Values	Difference	Target	Result	Values	Difference	Target	Result
O- 2431.35				O-2367.4			
H-2432.5	12	2444.5	Success @	H-2372.8			Success @
L-2420.5			2446.4	L- 2364.4	8.4	2381.2	2382.30
C-2430.55				C-2366.5			
O-2424.4				O-2381.7			
H-2429.3	7.9	2413.5	Failed	H-2383.7			
L- 2421.4				L-2376.8	6.9	2390.6	Failed
C-2425.5				C-2380.75			
O-2501.85				O- 2371.75			
H-2508.5	7.95	2492.15	Success @	H-2375.65			Success @
L-2500.1			2479.05	L-2370	5.65	2381.4	2383.30
C-2503.15				C-2372.75			
O- 2489.95				O-2375.75			
H-24993.2	6.9	2479.4	Success @	H-2382.85			Success @
L-2486.3			2468.9	L-2375	7.85	2390.7	2393.30
C-2488.1				C-2376.75			
O-2467.4				O-2366.70			
H-2471.1	8.6	2479.7	Success @	H-2367.9			Success
L-2462.5			2481.75	L-2363.8	4.1	2372	@2375.25
C-2468.25				C-2366.60			
O-2409.2				O- 2434.35			
H-2413.2			Success @	H-2436.5			
L-2403.2	10	2423.2	2426.75	L-2430.5	6	2442.5	Failed
C-2409.4				C-2434.55			
O- 2413.2				O-2427.4			
H-2415.2			Success @	H-2429.3			Success @
L-2409.5	5.6	2420.8	2422.30	L- 2423.4	5.9	2435.2	2437.3
C-2413.30				C-2427.5			
				O-2502.85			
				H-2507.5			Success
				L-2500.1	7.4	2514.9	@2520.25
				C-2502.15			

INTERPRETATION: From the above data the success rate of DOJI is 80%.

Table 2.Success Rate of HAMMER on INFOSYS

INFOSYS				INFOSYS			
Values	Difference	Target	Result	Values	Difference	Target	Result
O- 2432.35	12.30	2444.65	Success	O-2392.15	7.35	2399.5	Success
H-2432.35			@ 2446.4	H-2392.15			
L-2420.5			@2402.25	L-2385.2			
C-2430.55			C-2390				
O-2470.45	5.65	22476.1	Success	O-2496.25	10.05	2506.30	Failed
H-2470.45			@ 2480.20	H-2496.25			
L- 2464.8			L-2486.20				
C-2468.15			C-2494.25				
O-2393.15	8.3	2401.45	Failed	O- 2540.60	8.90	2541.5	Success
H-2393.15			H-2540.60				
L-2385.2			L-2532.30				
C-2391			C-2538.35				
O-2490.25	6.05	2496.3	Success	O- 2430.35	10.30	2440.65	Failed
H-2490.25			@2499.25	H-2430.35			
L-2484.20			L-2420.5				
C-2488.05			C-2427.55				
O- 2550.25	14.95	2565.20	Failed	O-2470.4	8.6	2479	Success
H-2550.25			H-2470.4				
L-2535.30			L- 2461.8				
C-2546.35			C-24768.15				
O- 2431.35	11.30	2442.65	Success	O-2390.5	10 .70	2401.20	Success
H-2431.35			H-2390.5				
L-2420.5			@2449.25	L-2380.2			
C-2429.55			C-2387				
O-2460.45	8.40	2468.85	Failed	O-2520.25	15.1	2535.40	Success
H-2460.45			H-2520.30				
L- 2452.05			L-2505.20				
C-2458.15			C-2517.25				
				O- 2558.50	10.20	2568.70	Failed
				H-2558.50			
				L-2548.30			
				C-2555.35			

INTERPRETATION: From the above data the success rate of HAMMER is 60%.

Table 3. Success Rate of INVERTED HAMMER on INFOSYS

INFOSYS				INFOSYS			
Values	Difference	Target	Result	Values	Difference	Target	Result
O- 2405.1	14.2	5390.15	Failed	O- 2238	14.95	2565.20	Failed
H-2418.55			H-2550.25				
L-2404.45			L-2535.30				
C-2404.45			C-2235.30				
O-2245.75	7.75	2561.25	Success	O- 2420.55	28.60	2477.75	Failed
H-2531.5			@ 2561.75	H-2449.15			
L- 2520.5			L-2420.55				
C-2525.8			C-2431.15				
O-2411.55	8.25	2403.15	Failed	O- 2505.1	14.2	2532.75	Success
H-2419.65			H-2518.55				
L-2411.4			L-2504.45				
C-2412.4			C-2504.15				
O- 2240	15.5	2565.75	Failed	O- 2307.1	14	2334.45	Success
H-2550.25			H-2320.55				
L-2535.30			L-2306.45				
C-2240.35			C-2306.15				
O- 2520.85	28.6	5691.95	Success	O-2520.55	15	2550.5	Failed
H-2549.15			@2489.3	H-2535.5			
L-2520.55			L- 2520.5				
C-2531.15			C-2525.8				
O- 2405.1	14.2	2432.75	Failed	O-2421.55	8.15	2437.8	Success
H-2418.55			H-2429.65				
L-2404.45			L-2421.4				
C-2404.15			C-2422.4				
O-2520.5	11	2542	Failed	O- 2540.05	10..25	2560.5	Failed
H-2531.5			H-2550.25				
L- 2520.5			L-2540				
C-2523.8			C-2240.35				
O-2401.49	8.25	2417.90	Failed	O- 2410.85	8.6	2427.75	Success
H-2409.65			H-2419.15				
L-2401.4			L-2410.55				
C-2402.4			C-2412.15				

INTERPRETATION: From the above data the success rate for Inverted Hammer is 40%

Table 4. Success Rate of INVERTED HAMMER on INFOSYS

INFOSYS				INFOSYS			
Values	Difference	Target	Result	Values	Difference	Target	Result
O- 2405.1	14.2	5390.15	Failed	O- 2238	14.95	2565.20	Failed
H-2418.55				H-2550.25			
L-2404.45				L-2535.30			
C-2404.45				C-2235.30			
O-2245.75	7.75	2561.25	Success	O- 2420.55	28.60	2477.75	Failed
H-2531.5			@ 2561.75	H-2449.15			
L- 2520.5				L-2420.55			
C-2525.8				C-2431.15			
O-2411.55	8.25	2403.15	Failed	O- 2505.1	14.2	2532.75	Success
H-2419.65				H-2518.55			@2535.10
L-2411.4				L-2504.45			
C-2412.4				C-2504.15			
O- 2240	15.5	2565.75	Failed	O- 2307.1			
H-2550.25				H-2320.55			
L-2535.30				L-2306.45	14	2334.45	Success
C-2240.35				C-2306.15			@2337.06
O- 2520.85	28.6	5691.95	Success	O-2520.55	15	2550.5	Failed
H-2549.15			@2489.3	H-2535.5			
L-2520.55				L- 2520.5			
C-2531.15				C-2525.8			
O- 2405.1	14.2	2432.75	Failed	O-2421.55	8.15	2437.8	Success
H-2418.55				H-2429.65			@2439.50
L-2404.45				L-2421.4			
C-2404.15				C-2422.4			
O-2520.5	11	2542	Failed	O- 2540.05	10..25	2560.5	Failed
H-2531.5				H-2550.25			
L- 2520.5				L-2540			
C-2523.8				C-2240.35			
O-2401.49		2417.90	Failed	O- 2410.85	8.6	2427.75	Success
H-2409.65	8.25			H-2419.15			@2430.6
L-2401.4				L-2410.55			
C-2402.4				C-2412.15			

INTERPRETATION: From the above data the success rate for Inverted Hammer is 40%

Table 5. Success Rate of Bearish Engulfing on INFOSYS

INFOSYS				INFOSYS			
Values	Difference	Target	Result	Values	Difference	Target	Result
O- 2425.5	7.85	2436.55	Success	O-2338.3	9.45	2357.15	Success
H-2428.7			@ 2430	H-2347.75			@2361.50
L-2411.25				L-2337.9			
C-2417.65				C-2347.75			
O-2558.5	7.75	2242.15	Failed	O- 2430.8	4.45	2441.25	Failed
H-2559.7				H-2436.85			
L- 2549.9				L-2428.35			
C-2550.75				C-2435.25			
O-2534	6.65	2220.05	Failed	O-2386.65	10.05	2406.8	Success
H-2534.75				H-2396.75			@2410.30
L-2526.7				L-2386.65			
C-2527.35				C-2396.7			
O- 2546.8	9	2527.5	Success	O- 2466.3	5.35	2479.25	Failed
H-2552.5			@2515.1	H-2473.9			
L-2536.5				L-2463.1			
C-2537.8				C-2471.65			
O- 2422.5	7.2	2407.3	Success	O-2521.7	7.45	2536.85	Success
H-2425.95			@2406.1	H-2529.4			@2539.10
L-2414.5				L- 2521.7			
C-2415.3				C-2529.15			
O- 2532.5				O-2518.3	8.45	2236.2	Failed
H-2535.95			Success	H-2227.75			
L-2524.5	7.2		@2545.10	L-2517.9			
C-2525.3		2543.15		C-2526.75			
O- 2576.3	5.35		Failed	O-2408.3			
H-2583.9		2589.25		H-2417.75			Success
L-2573.1				L-2407.9	9.45	2427.2	@2432
C-2581.65				C-2417.75			
O-2471.7	4.45	2483.85	Success				
H-2479.4			@2488.30				
L- 2471.7							
C-2479.15							

INTERPRETATION: From the above data the success rate of BEARISH ENGULFING is 60%

Table 6. Success Rate of DOJI on TCS

INFOSYS				INFOSYS			
Values	Difference	Target	Result	Values	Difference	Target	Result
O- 1660.4	19.4	1633.9	Success	O-1858.7	20.8	1888.2	Success
H-1672.7			@ 1619.85	H-1867.4			@ 1890.15
L-1653.3				L-1846.6			
C-1662.15				C-1856			
O-1908.9	39.95	1961.75	Success	O- 1880.85	20.1	1913.5	Success
H-1921.8			@ 1965.55	H-1893.4			@ 1915.1
L- 1881.85				L-1873.3			
C-1909.6				C-1881.85			
O-1878.7	20.8	1845.8	Success	O-1780.25	20.15	1810.65	Success
H-1887.4			@ 1845.15	H-1790.50			@ 1812
L-1866.6				L-1770.35			
C-1876				C-1782.5			
O- 1780.85	1	1794.4	Success	O- 1610.4			
H-1793.4			@ 181.85	H-1622.7	19.4	1642.1	Failed
L-1773.3				L-1603.3			
C-1781.85				C-1612.15			
O-1880.25	20.15	1910.65	Failed	O- 1760.4	18.4	1791.1	Success
H-1890.50				H-1772.7			@ 1795
L-1870.35				L-1754.3			
C-1882.5				C-1762.15			
O- 1760.4				O-1608.9	20.5	1641.5	Success
H-1772.7	19.4	1792.1	Success	H-1621.85			@ 1643.15
L-1753.3			@ 1795.10	L- 1601.8			
C-1762.15				C-1609.6			
O- 1860.4	14.4	1884.1	Success	O-1658.7	20.8	1688.2	Failed
H-1869.7			@ 1885.55	H-1667.4			
L-1855.3				L-1646.6			
C-1862.15				C-1656			
O-1608.9	10.95	1626.75	Success				
H-1615.8			@ 1628.10				
L- 1604.85							
C-1909.6							

INTERPRETATION: From the above data the success rate of DOJI is 80%

Table 7. Success Rate of HAMMER on TCS

INFOSYS				INFOSYS			
Values	Difference	Target	Result	Values	Difference	Target	Result
O- 1609.35	21.95	1566.7	Success	O-1650.65			
H-1610.6			@ 1553.85	H-1661.9	59.5	1721.4	Failed
L-1588.65				L-1602.4			
C-1603.35				C-1658.2			
O-1847.55	24.35	1878.7	Failed	O- 1821.45			
H-1854.35				H-1833.2	33.25	1866.45	Failed
L- 1830				L-1899.95			
C-1852.55				C-1833.2			
O-1550.65	59.5	1621.4	Success	O-1641.65			
H-1561.9			@1630.65	H-1641.65	27.25	1668.9	Success
L-1502.4				L-1614.4			@1671.2
C-1558.2				C-1634.05			
O- 1621.45	33.25	1666.45	Failed	O-1510.65			
H-1633.2				H-1521.9	20.5	1542.4	Failed
L-1599.95				L-1501.4			
C-1633.2				C-1512.2			
O-1631.65	27.25	1658.9	Failed	O- 1909.35			
H-1631.65				H-1910.6			Failed
L-1604.4				L-1888.65	21.95	1932.5	
C-1624.05				C-1903.35			
O-1550.65				O-1947.55			
H-1551.9	49.5	1601.4	Success	H-1954.35		1978.7	Success
L-1502.4			@1605.65	L- 1930	24.35		@1980
C-1558.2				C-1952.55			
O- 1709.35				O-1750.65			
H-1710.6				H-1761.9	60.5		Failed
L-1689.65	20.95	1731.55	Failed	L-1701.4		1822.4	
C-1703.35				C-1758.2			
O-1747.55							
H-1754.35			Success				
L- 1730	24.35	1778.7	@1780.10				
C-1752.55							

INTERPRETATION: From the above data the success rate of HAMMER is 40%

Table 8. Success Rate of INVERTED HAMMER on TCS

INFOSYS				INFOSYS			
Values	Difference	Target	Result	Values	Difference	Target	Result
O- 1647	19.55	1620.65	Success	O-1684.65	7.4	1702.2	Failed
H-1659.75			@ 1603.3	H-1694.8			
L-1640.2				L-1675			
C-1640.2				C-1677.25			
O-1581.85	17.6	1617.1	Failed	O- 1970	15.8	1998.1	Success
H-1599.05				H-1982.3			@1998.9
L- 1581.45				L-1966.5			
C-1587.45				C-1966.5			
O-1584.65	7.4	1602.2	Success	O-1687.15	23.65	1627.95	Failed
H-1594.8			@1618.95	H-1604.3			
L-1575				L-1680.65			
C-1577.25				C-1690.15			
O- 1870	15.8	1850.7	Success	O- 1747	20.55	1781.3	Success
H-1882.3			@ 1626.6	H-1760.75			@1784
L-1866.5				L-1740.2			
C-1866.5				C-1740.2			
O-1587.15	23.65	1557	Failed	O- 1747	19.55	1779.3	Failed
H-1604.3				H-1759.75			
L-1580.65				L-1740.2			
C-1590.15				C-1740.2			
O- 1747	18.55	1777.3	Success	O-1681.85	17.6	1716.65	Success
H-1758.75			@17780.5	H-1699.05			@1718.3
L-1740.2				L- 1681.45			5
C-1740.2				C-1687.45			
O- 1647	15.55	1671.3	Failed	O-1784.65	7.4	1802.2	Success
H-1655.75				H-1794.8			@1803.5
L-1640.2				L-1775			
C-1640.2				C-1777.25			
O-1781.85	17.9	1816.95	Success				
H-1799.05			@1820				
L- 1781.45							
C-1787.45							

INTERPRETATION: From the above data the success rate of INVERTED HAMMER is 60%

Table 9. Success Rate of Bullish Engulfing on TCS

INFOSYS				INFOSYS			
Values	Difference	Target	Result	Values	Difference	Target	Result
O- 1923.45	26.75	1991.6	Failed	O-1960.3	16.55	1986.15	Failed
H-1964.85				H-1976.5			
L-1923.8				L-1952.7			
C-1950.2				C-1976.85			
O-1817.6	32	1881.6	Success	O- 1798.05	6.45	1870.95	Success
H-1849.6			@ 1882.3	H-1834.5			@ 1882.2
L- 1813.5				L-1797.85			
C-1849.6				C-1834.5			
O-1860.3	16.55	1836.15	Failed	O-1624.9	26	1679.85	Success
H-1876.5				H-1653.85			@1680.25
L-1852.7				L-1622.45			
C-1876.85				C-1650.9			
O- 1698.05	6.45	1770.95	Success	O-1820.9	22	1875.85	Failed
H-1734.5			@ 1782.2	H-1853.85			
L-1697.85				L-1822.45			
C-1734.5				C-1850.9			
O-1824.9	26	1879.85	Success	O- 1698.05	6.45	1770.95	Success
H-1853.85			@1880.25	H-1734.5			@ 1782.2
L-1822.45				L-1697.85			
C-1850.9				C-1734.5			
O-1720.9	32	1981.6	O-1720.9	O-1524.9	26	1579.85	Success
H-1753.85				H-1753.85			@1580.25
L-1722.45				L-1722.45			
C-1750.9				C-1750.9			
O- 1823.45	26.75	1891.6	O- 1823.45	O-1620.9	22	1675.85	Failed
H-1864.85				H-1864.85			
L-1823.8				L-1823.8			
C-1850.2				C-1850.2			
O-1917.6	32	1981.6	O-1917.6				
H-1949.6				H-1949.6			
L- 1913.5				L- 1913.5			
C-1949.6				C-1949.6			

INTERPRETATION: From the above data the success rate of BULLISH ENGULFING is 60%.

Table 10. Success Rate of BEARISH ENGALFING on TCS

INFOSYS				INFOSYS			
Values	Difference	Target	Result	Values	Difference	Target	Result
O- 1877.4	28.2	1853.85	Failed	O-1766.55	68.85	1813.1	Failed
H-1878.9				H-1766.55			
L-1856.65				L-1781.95			
C-1852.7				C-1797.7			
O-1591.2	15.3	1609.5	Success @1630.65	O-1801.85	29.8	1842.25	Failed
H-1594.2				H-1803			
L- 1562.9				L-1772.05			
C-1575.9				C-1773.95			
O-1666.55	68.85	1513.1	Failed	O-1550.23	3.98	1541.25	Success @ 1536.50
H-1666.55				H-1570.25			
L-1581.95				L-1545.23			
C-1597.7				C-1546.25			
O-1601.85	29.8	1542.25	Failed	O-1791.2	15.3	1809.5	Success @1830.65
H-1603				H-1794.2			
L-1572.05				L- 1762.9			
C-1573.95				C-1775.9			
O-1650.23	3.98	1641.25	Success @ 1636.50	O-166.55	68.85	1513.1	Failed
H-1670.25				H-1666.55			
L-1645.23				L-1581.95			
C-1646.25				C-1597.7			
O-1660.23	5.98	1676.23	Failed	O-1701.85	29.8	1742.25	Failed
H-1670.25				H-1703			
L-1645.23				L-1772.05			
C-1654.25				C-1773.95			
O- 1577.4	28.2	1553.85	Failed	O-1850.23	3.98	1841.25	Success @ 1836.50
H-1578.9				H-1870.25			
L-1556.65				L-1845.23			
C-1552.7				C-1846.25			
O-1691.2	15.3	1609.5	Success @1630.65				
H-1694.2							
L- 1662.9							
C-1675.9							

INTERPRETATION: From the above data the success rate of BEARISH ENGULFING is 40%

Table 11. Success Rate of DOJI on WIPRO

INFOSYS				INFOSYS			
Values	Difference	Target	Result	Values	Difference	Target	Result
O- 632.35	18.3	650	Success @ 651.05	O-390.50	13.6	413.9	Failed
H-631.7				H-400.30			
L-613.4				L-386.70			
C-631.7				C-370.25			
O-668.8	8.85	656.1	Failed	O-410.25	19.5	449.8	Failed
H-673.8				H-430.30			
L- 664.95				L-410.80			
C-670.35				C-407.90			
O-520.80		545.7	Success @551.30	O- 432.35	18.3	450	Success @ 451.05
H-530.50	15.2			H-431.7			
L-515.30				L-413.4			
C-520.25				C-431.7			
O-490.50	13.6	6500.3	Failed	O-568.8	8.85	556.1	Failed
H-500.30				H-573.8			
L-486.70				L- 564.95			
C-470.25				C-570.35			
O-510.25	19.5	549.8	Failed	O-420.80		445.7	Success @551.30
H-530.30				H-430.50	15.2		
L-510.80				L-415.30			
C-507.90				C-420.25			
O- 332.35	18.3	350	Success @ 351.05	O-590.50	13.6	513.9	Failed
H-331.7				H-500.30			
L-313.4				L-586.70			
C-331.7				C-570.25			
O-368.8	8.85	356.1	Failed	O-610.25	19.5	649.8	Failed
H-373.8				H-630.30			
L- 364.95				L-610.80			
C-370.35				C-607.90			
O-420.80		445.7	Success @551.30				
H-430.50	15.2						
L-415.30							
C-420.25							

INTERPRETATION: From the above data the success rate of DOJI is 40%

Table 12. Success Rate of HAMMER on WIPRO

INFOSYS				INFOSYS			
Values	Difference	Target	Result	Values	Difference	Target	Result
O- 625.35	18.3	650	Success	O- 419.5	17.5	437.05	Success
H-631.7			@ 651.05	H-419.55			@440.05
L-613.4				L-402.05			
C-6131.7				C-417.45			
O-670.95	18.65	689.5	Failed	O-406.65	10.45	420.8	Success
H-670.95				H-410.35			@436.65
L- 652.3				L-399.9			
C-668.2				C-408.4			
O-668.95	10.2	683.65	Success@	O- 525.35	18.3	550	Success
H-673.45			@689.75	H-531.7			@551.05
L-663.25				L-513.4			
C-672.95				C-5131.7			
O- 519.5	17.5	537.05	Success	O-370.95	18.65	389.5	Failed
H-519.55			@502.05	H-370.95			
L-502.05				L- 352.3			
C-517.45				C-368.2			
O-506.65	10.45	520.8	Success	O-468.95	10.2	483.65	Success
H-510.35			@536.65	H-473.45			@ 489.75
L-499.9				L-463.25			
C-508.4				C-472.95			
O- 325.35	18.3	350	Success	O- 619.5	17.5	637.05	Success
H-331.7			@ 351.05	H-619.55			@602.05
L-313.4				L-602.05			
C-3131.7				C-617.45			
O-470.95	18.65	489.5	Failed	O-606.65	10.45	620.8	Success
H-470.95				H-610.35			@636.65
L- 452.3				L-599.9			
C-468.2				C-608.4			
O-568.95	10.2	583.65	Success				
H-573.45			@ 589.75				
L-563.25							
C-572.95							

INTERPRETATION: From the above data the success rate of HAMMER is 80%.

SCOPE OF THE STUDY

The study is confined to some of the Indices in the National Stock Exchange such as INFOSYS, TCS and WIPRO

STATEMENT OF THE PROBLEM

Individual investors are large in number but their investible resources are comparatively smaller. They generally lack the skill to carry out extensive evaluation and analysis before investing. In this way the Technical Analysis will be the one of the way to make the investor well knowledge.

OBJECTIVES OF THE STUDY

DATA ANALYSIS AND INTERPRETATION

$$\text{Success rate} = \frac{\text{Number of success events}}{\text{Total number of events}} \times 100$$

- To ensure the importance of Candlestick analysis
- To understand the different patterns of Candlesticks
- To calculate the Success Rate of candlestick patterns on selected IT companies
- To suggest investment (Buying or Selling) decisions.

PERIOD OF THE STUDY

The period of study is 2 months (may-july) 2013

LIMITATIONS OF THIS STUDY

- Detail study of the topic was not possible due to time constraint.
- Everything should be considered at market movement.
- Same outcomes may not be for all commodities.
- Only few commodities were studied through
- Doji, hammer, inverted hammer, bullish, bearish engulfing.

FINDINGS

- Derivative provides a good source of investment.
- Market movement is only according to supply and demand.
- Investors have the choice of both physical delivery and Roll over contracts.
- The success rate of INFOSYS is 60% over the study period.
- The success rate of TCS is 56% over the study period.
- The success rate of WIPRO is 60% over the study period.

SUGGESTIONS

- Market intermediaries should take more efforts on spreading awareness about derivatives.
- Risk is more as compared to commodity and equity market.

- Investment decisions can be taken through DOJI as compared to other tools.
- The decision from BULLISH ENGULFING tool has consistency from others.
- Investment in COMPANY futures based on technical analysis is better in short term only.

CONCLUSION

Based on the study it can be concluded that derivatives provide good source of investment and decisions can be taken through candlestick analysis which is according to the market movement.

REFERENCES

- Kevin Alvoti and Deddy P. Koesindartoto, 2014. "Japanese Candlestick Technical Trading Strategies in Indonesia Capital Market", Proceedings of 7th Asia-Pacific Business Research Conference, Singapore ISBN: 978-1-922069-58-0, Pp: 1-13
- Goo, Yeong-Jia., Chen, Dar-Hsin., Chang, Yi-Wei. 'The application of Japanese Candlestick Trading Strategies In Taiwan', Investment Management and Financial Innovations, Vol. 4, Issue 4.
<http://www.nseindia.com/>
http://www.nseindia.com/content/indices/ind_nifty.html
<http://www.sharekhan.com/stock-market/11/home.html>
<http://www.moneycontrol.com>
