



# Elliott Wave Study with Timings of Impulse and Corrective Waves

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**Abstract :** Based on the Elliott Wave, the market goes in predictable ways in response to shifting investor sentiment and price momentum. Crowd behaviour will mainly shift from optimism to pessimism and around again, allowing for the prediction of the development of some market movements. R.N Elliott discovered The Wave Principle, which states, social or crowd behaviour shifts and trends in observable patterns. The Wave Principle offers a thorough explanation of how markets function, not just a technique for predicting. This Wave Principle is employed in numerous areas of widespread human behaviour, but the financial sector is the area where it is frequently used. In fact, the stock market is much more significant when looked at in isolation than casual speculators might think along with Elliott's theory this paper includes timings of wave completion of impulsive and corrective waves from the technical study of 3-4 thousand charts.

**IndexTerms** –Elliott Wave, Wave Principle, Stock Market, Charts.

## I. INTRODUCTION

Fundamental analysis, as well as technical, are the two subcategories that will be used to make investment decisions as a way of research. In fundamental analysis, the overall theoretical stock price is analyzed primarily for long-term investment purposes, and also the economy, industries, & company-based data are all thoroughly examined. Technical analysis, however, simply examines the demand and supply inside a market. The primary goal is to research technological indicators using diverse databases. It concentrates on intraday trading, which is a short-term investment that must be completed within a day. Utilizing the use of charts, technical analysis will portray the data in order to detect the structure of upcoming activity. It will utilize a variety of tools to forecast price movements. Need for the Study: This research contains a technical analysis approach to assess the share, with the aid of technical tools such as moving average & ROC, RSI, it will also help to analyze the day traders and near-term investors to make the right judgment to invest in stock by analyzing the price action with the aid of mentioned technique. These instruments are used to monitor daily changes in equity market value. The wave theory, which was developed as a consequence of Ralph Nelson Elliott's 1930s global stock markets study, is still being used today and is widely accepted by individuals and investment firms. Similar to all similar technical analyses, the Elliott waves concept primarily concentrates on examining a time history of market rates and makes the assumption that past trends may foretell future trends. Impulse cycles, denoted by digits, while correction waves, denoted by alphabet, make up this Elliott model. This research set out to look at the potential of 1 of the foremost popular technical approaches to stock market forecasting: the Elliott wave theory. The technique was tested on the stock market to see if it was possible to anticipate forthcoming securities exchange values by applying technical analysis.

## II. LITERATURE SURVEY

Ralph Nelson Elliott's study of financial markets in the 1930s led to the development of the wave theory, which is still in use today by many traders and investment institutions. Similar to all other technical analyses, the Elliott wave theory primarily concentrates on examining a timeline of financial market values and makes the assumption that past patterns may foretell upcoming patterns. The Elliott framework is made up of corrective motion and impulse motion, which are represented by numbers (indicated by letters). Waves come in two flavours impulsive and corrective impulse waves propagate in the greater degree wave's direction. Advancement waves are impulsive and decline waves are corrective when the greater degree wave is up. Impulse waves are down and corrective waves are up when the greater degree wave is down. Motive waves, also known as impulse waves, follow the larger trend or degree wave. The bigger degree wave is opposed by the corrective waves.

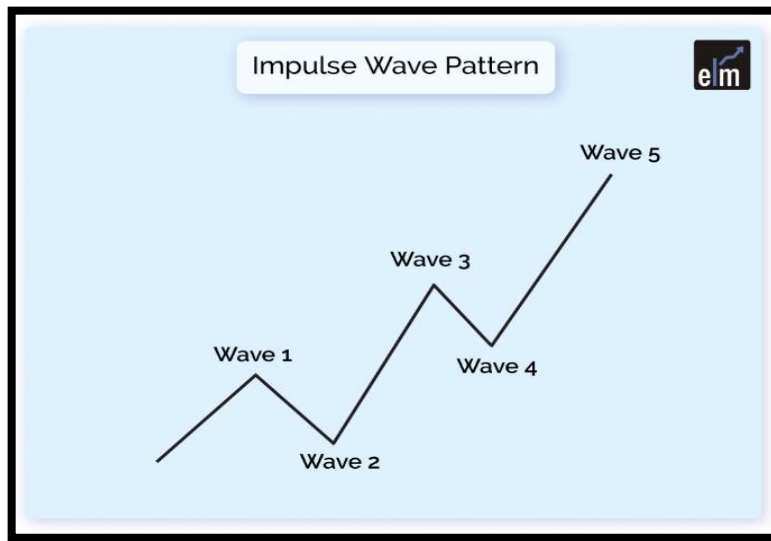


Fig 1 Impulse Wave Pattern (Source elearnmarkets.com)

Impulsive motion is a technical trading idea that refers to a ferocious movement in the rate of a financial asset that veers from the main course of the typical trend. The Elliott Wave Theory's variants of impulse waves have the intriguing property of not being constrained to a certain length of time. Because of this, individual waves can linger for several hours, years, or even years. These impulse waves run close to the pattern regardless of the time interval selected. The five distinct sub-waves that make up the impulse waves all move collectively in the paret way as the major trend of the next biggest direction. The image (Fig no 1) up top displays an ascending 5-wave pattern. From the bottom left to the top right of the chart, the entire wave is upward. Since they follow the trend, waves 1, 3, and 5 are impulse waves. The fact that waves 2 and 4 go against this larger trend makes them corrective waves. A 5-wave sequence is created by a simple impulse pattern. It is possible to easily identify this occurrence on the market and it is recognised to be a driving wave. It has five different sub-waves, two correcting waves, and three impulsive waves, identical to all other waves of motivations. Three separate rules also contribute to the description of the structure. In a sense, they are unalterable laws. The structure would not be classified as an impulse wave and would need to be renamed if all of the rules were breached. Correcting waves, also known as diagonal waves, are made of 3 sub-waves or a trio of sub-waves that result in a net movement that is perpendicular to the trend of the next-largest degree. Its objective, like with other motive impulses, is to drive the market in the trend's direction. There are 5 sub in the correcting wave. The diagonal is different because it might seem as a wedge that is either extending or shrinking. Depending on the sort of diagonal being observed, the sub-waves of the diagonal may not have a count of five. Every sub-wave of the diagonal, like the primary wave, never exactly repeats the preceding sub-wave, and wave number 3 of a diagonally may not be the smallest wave. A classic corrective waveform normally comprised of 3 waves, a, b, and c.

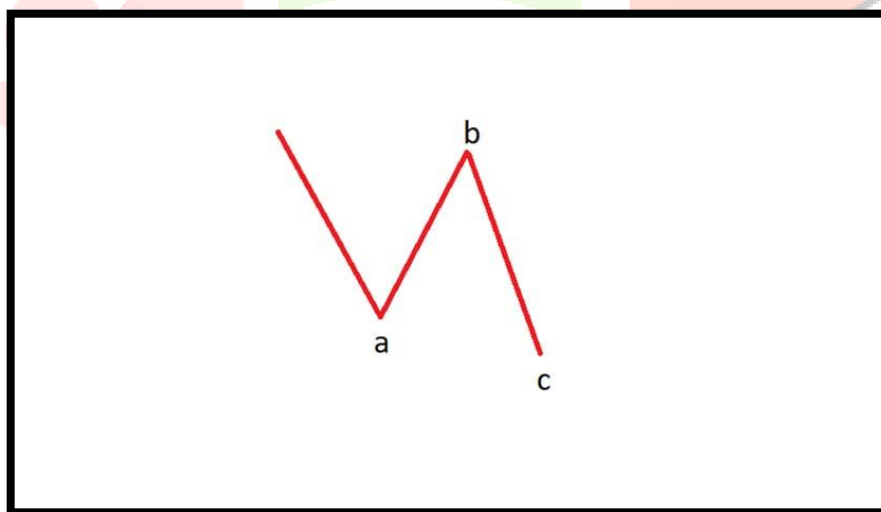


Fig no 2 Corrective Wave Pattern (Source tradingpedia.com)

An ABC correcting pattern is shown in the chart above. Larger waves a and c are impulses, as you can see. They are moving in the area of the greater degree wave, which explains this. The bigger degree waves are plainly represented by the fact that the whole motion is downward. Both a and c are impulse waves because they follow the greater degree wave. On the contrary, wave b is a correction wave that travels in opposition to the greater degree wave.

**III. METHODOLOGY**

1. Correction endpoint must be near 200 EMA or 100 EMA.

The major motive of this theory is to identify the correction area. According to the study of 3 to 4 thousand charts correction ends nearby 200 and 100 EMA. If any chart doesn't come to its 200 or 100 EMA that correction will be considered an invalid chart for correction. Note Correction ends on 100 EMA or 200 EMA of that certain timeframe such as 1D, 1W, 1M.



Fig 3 Setup Chart

2. Use Price Patterns for Confirmation of Impulse Waves.

Patterns such as M, W, Head & Shoulder, Triangle, Rectangle should be used for more confirmation for finding out impulsive waves.

3. Correction endpoint should be near fibonacci levels.

Correction ends near 100 and 200 EMA along with that for more confirmation we use fib retracement toll. Fibonacci patterns, which derive out from Fibonacci numbers, are horizontal lines that show potential areas of demand and supply. A percentage is connected to each level. How much of a previous move the price has retraced is shown by the percentages. There are four Fibonacci ratios for price correction: 23, 38, 61, 8, and 78. Even though it's not really a Fib ratio, 50% is also employed. The indication may be created between any two important price points, such as a high and a low, making it handy.

4. Correction should end according to the timeline.

Timeline is the core of this project timeline and it is derived from analysis of 3-4 thousand charts. Timeline defines the Correction Time that will be consumed by a chart to reach 200 or 100 EMA and complete the correction, what will be the Targets of the chart after correction, along with that after completion of correction when the impulse wave starts what will be the time in what time impulse wave will take to complete.

Table 1 Timeline according to Timeframe

Sr No	Timeframe	Time Consumed	Target of Price	Target Achieve Time
1	1 Month	7 to 12 Years	6X to 10X	33% to 52% of the Time Consumed
2	1 Week	11 to 24 Months	60% to 90%	33% to 52% of the Time Consumed
3	1 Day	6 to 12 Months	25% to 45%	33% to 52% of the Time Consumed

5. Price should not cross the previous low if 200 EMA is Breached. If 200 EMA is breached and the price goes below the previous low and high clearly then it is an indication that the price will move to the next timeframe Eg If the price crosses down 1D 200 EMA decisively then it is a clear indication that chart will go to 1W 100 or 200 EMA.



Fig no 4 200 EMA crossed down

6. Stop Loss should be managed very precisely. As stop loss is considered a friend of trading in this study stop loss is used as insurance for opportunities to ride the successful trades.
7. When RSI Divergence is seen, Trend Changing Areas are indicated. RSI divergence indicates the difference between buyers at the same price at different location.

#### IV. SETUP CHRONOLOGY

##### 1. PRE CONDITIONS

Pre-conditions are reached when the 200 EMA is contacted this indicates that price and price-wise adjustments have been finished, but not in a timely manner.



Fig no 5 Pre Conditions

## 2. LOCATION

Location indicates the point in time and price correction that is finished in accordance with the timeframe.



Fig no 6 Location

## 3. EVENT

Event is the place when prices starts its movement as an impulsive wave the area where all the precondition are completed along with timewise correction.



Fig no 7 Event

### 3.1 Stop Loss

According to the study of charts and study, it is derived that stop losses are maintained below

1. 200 EMA.
2. Price previous or last low.
3. Confirmation pattern of a setup

Note - Price should not cross the previous low and 200 EMA.

3.2 Results



Fig no 8 Tejas Network Chart

Table 2 Trade Details

Sr No	Pictacular	Details
1	Time Consumed	9 Months
2	Buy Average Value	488
3	Quantity (Total)	178
4	Sell Average Value	654
5	Target Achieved Time	2.5 Months (27.77%)
6	Target Achieved	654
7	ROI	34%
8	Total PnL	29500



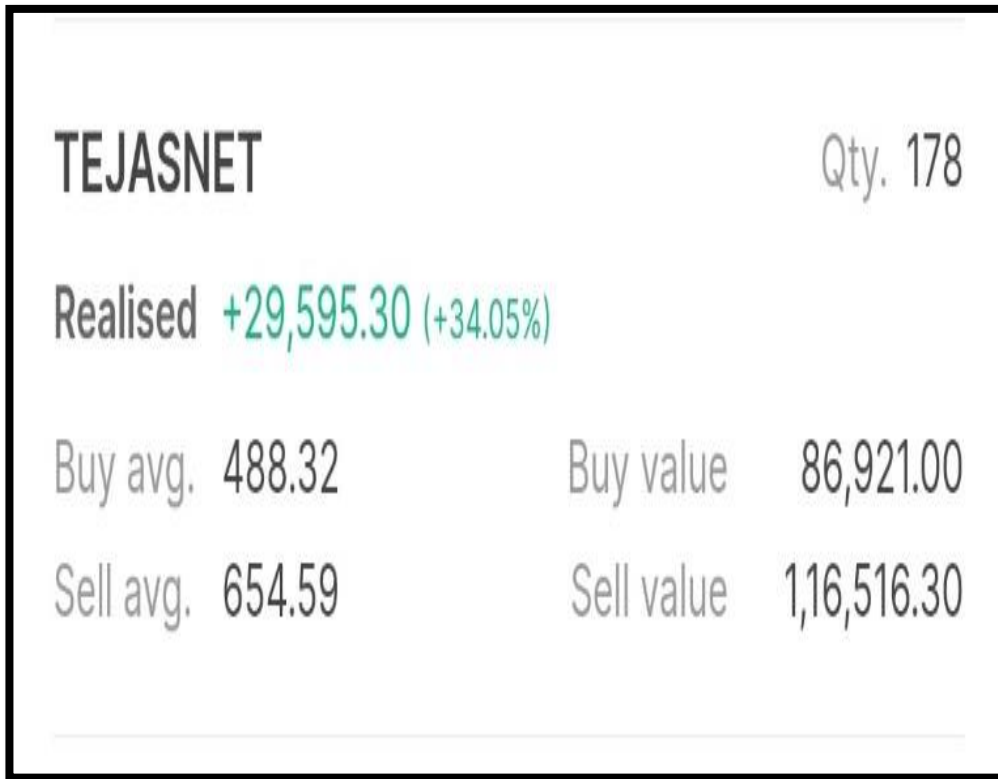


Fig no 9 Trade Statement

3.3 Case Study

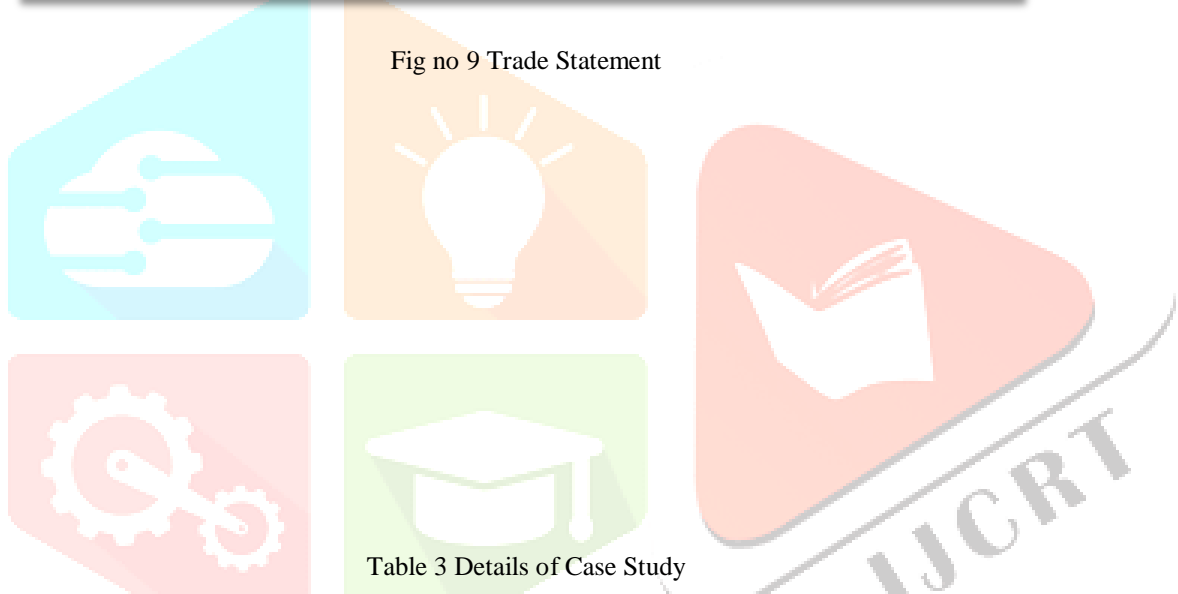


Table 3 Details of Case Study

Sr No	Pictacular	Details
1	Time Consumed	6 Years
2	Value at 200 EMA (M)	550
3	Expected Target	3300 to 5500
4	Target Achieved	10,000
5	Target Achieved Time	2.4 Years(40%)



Fig No 10 Case StudyTata Ellexi Chart

3.4 P n L of September 2022

Invested	4,79,882.05	Current	5,33,581.55
P&L	+53,699.50 +11.19 %		
<p>Q Family Analytics</p>			
4 Qty. • Avg. 2253.20	+7.80 %		
ACC	+703.20		
Invested 9012.80	LTP 0.00 (0.00%)		
15 Qty. • Avg. 687.28	+32.97 %		
ADANI PORTS	+3,398.50		
Invested 10309.25	LTP 0.00 (0.00%)		
201 Qty. • Avg. 143.69	+19.01 %		
EXIDEIND	+5,489.30		
Invested 28881.70	LTP 0.00 (0.00%)		
54 Qty. • Avg. 133.55	-30.74 %		
GAIL	-2,216.70		
Invested 7211.70	LTP 0.00 (0.00%)		

Fig no 11 P n L of September Month



#### 4. CONCLUSION

It is highly probable that the Elliott Wave theory holds true in the Indian Financial Markets based on the data above on the existence of the Elliott Wave Pattern. It was concluded that 82% of charts evaluated displayed the Elliott Wave Pattern. Elliott wave theory is applicable in India, hence it might be implemented as a technical analytical tool to forecast the future stock price of the companies on an individual basis. It has been shown that the Elliott wave theory may be used to generate a precise prediction for both past and future patterns. Elliott Wave study has made a significant impact to both financial theory and practise. The Elliott waves model's impulse wave and empirical evidence for the chronology that is used for correction make up the majority of the theory's contribution. As a consequence of the anticipation for the aforesaid pattern being entirely verified by the actual pattern, the data demonstrate the Elliott framework was a useful tool in forecasting the Indian Financial divisions for the phase from October 2022 to June 2022. Since June 16, 2022, a probable future pattern for the Nifty exchange rate has been offered.

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